

ANNUAL REPORT

2025-26

Researching Roads | Building a Better Tomorrow



RESEARCH
EXCELLENCE



ENGINEERING
SOLUTIONS



INNOVATION FOR
FUTURE



SUSTAINABILITY
& RESILIENCE



NATION
BUILDING

1952 - 2027
PLATINUM JUBILEE YEAR

सीएसआईआर-केंद्रीय सड़क अनुसंधान संस्थान, नई दिल्ली

गुणवत्ता नीति

सीएसआईआर-केंद्रीय सड़क अनुसंधान संस्थान (सीआरआरआई) सड़क और सड़क परिवहन तथा सेतु एवं संरचना के क्षेत्र में व्यावसायिक उत्कृष्टता के लिए प्रयत्नशील है।

संस्थान निम्नलिखित के लिए प्रतिबद्ध है:

- क. औद्योगिक के साथ-साथ सामाजिक अनुसंधान एवं विकास कार्यक्रमों, परामर्श सेवाओं एवं मानव संसाधन विकास कार्यक्रमों व व्यवसाय की विश्वस्तरीय तकनीकी आवश्यकताओं को पूरा करने के लिए।
- ख. संस्थान की गुणवत्ता प्रबंधन प्रणाली में निरंतर सुधार।
- ग. ग्राहक संतुष्टि, और
- घ. सभी अनुप्रयोज्य आवश्यकताओं का अनुपालन करने के लिए।

च. रविशंकर
डॉ. चालुमुरी रवि शेखर

निदेशक

सीएसआईआर-सीआरआरआई

CSIR - Central Road Research Institute, New Delhi

Quality Policy

The CSIR - Central Road Research Institute (CRRRI) endeavours towards Professional Excellence in the area of Roads and Road Transportation including Bridges and Structures.

The Institute is committed to:

- a. Accomplish Industrial as well as Societal Research and Development Programmes, Consultancy Services, HRD Programmes meeting technical needs of the profession globally.
- b. Continual improvement of Quality Management System of the Institute
- c. Customer satisfaction, and
- d. Comply with all applicable requirements.


Dr. Ch. Ravi Sekhar
Director
CSIR-CRRRI

Mandate

The scientific & technical objectives of CSIR-CRRI are:

- To develop specifications and manuals for construction of low cost roads for different regions of country.
- To carry out applied research for investigation, construction and maintenance of different type of roads and runway including studies on related materials such as aggregates, bitumen, cement, etc. with a view to effecting economy and achieving greater serviceability.
- To develop appropriate tools, machinery, equipment and instruments for adapting technologies as related to highway engineering and relevant to the country for indigenous use.
- To carry out research and development activities in all aspects of roads under varying climatic and traffic conditions.
- To carry out research and development in all aspects of road traffic and transportation engineering, including study of accidents, development of road safety measures, psychology of road users and transportation economics in relation to different forms of transport.
- To render technical advice and consultancy services to various organisations in roads and related fields to avoid import of foreign expertise.
- To train engineers through refresher courses, workshops and training programmes for wider application of indigenously developed technologies.
- To create and establish all the needed infrastructure, both equipment and expertise, in the various facets of highway and transportation engineering for investigation, planning, design, construction and maintenance as well as to achieve judicious solutions for special problems.
- To collaborate with other institutions for R&D studies concerning roads, road transportation and related practices particularly on regional problems.
- Publication of scientific and technical findings in journals, symposia, conferences, etc. devoted to research and development in related areas of highway engineering.
- Generation of intellectual property and its commercialization through technology transfer.

CSIR-CRRI ORGANISATIONAL STRUCTURE (as on 31.03.2026)

Research Council

Dr. Chalumuri Ravi Sekhar
Director

Management Council

R&D Divisions

Geotechnical Engineering (GE)

Dr. Kanwar Singh, Head

Flexible Pavements (FP)

Sh. Satish Pandey, Head

Rigid Pavements (RP)

Mrs. Lalita Jangpangi, Head

Pavement Evaluation (PE)

Dr. Pradeep Kumar, Head

Traffic Engineering & Safety (TES)

Dr. Mohan Rao, Head

Transportation Planning & Environment (TPE)

Dr. Nasim Akhtar, Head

Bridge Engineering and Structures (BES)

Dr. Rajeev Goel, Head

R&D Management Divisions

Information, Liaison and Training (ILT)

Dr. K. Ravinder, Head

Planning, Monitoring & Evaluation (PME)

Dr. Vinod Karar, Head

Computer Centre and Networking (CCN)

Dr. E. Madhu, Head

Knowledge Resource Centre (KRC)

Dr. Rina Singh, Head

Engineering Services Division (ESD)

Dr. Abhishek Mittal, Head

Sh. Jitendra Kumar Giri, Engineer-in-Charge, ESD

Mechanical and Transport (MAT)

Dr. P. C. Meshram, Coordinator

Quality Management Division (QMD)

Sh. Manoj Kumar Shukla, Head

Maharani Bagh Staff Quarters (MBSQ)

Dr. A.K Sagar, Head

Sh. Mukesh Kumar, Sectional Head, MBSQ Maintenance

Horticulture

Sh. A.K Jain, Head

Administration

Mrs. Beena Anupa Sequeira, Sr. Controller of Administration

Sh. Rejimon M.J., Controller of Finance & Account

Sh. Santosh Kumar, Administrative Officer

Sh. Prasenjeet Mitra, Store & Purchase Officer

Sh. Jageshwar Mehto, Finance & Account Officer

Sh. Anil Kumar Upadhyay, Section Officer, Personnel Cell

Sh. Manoj Swaroop Shukla, Section Officer, E-I

Mrs. Nidhi Gupta, Section Officer, E-II

Mrs. Binder Kaur, Section Officer, General & Works

Sh. Rajnish, Section Officer, Account

Sh. Meesam Zaidi, Section Officer, E-I

Sh. Divyam, Section Officer, Vigilance

Sh. Sanjeev Kumar Yadav, Section Officer, Purchase

Sh. Sanjay Roy, Section Officer, Main Store

भारतीय मानक ब्यूरो

IS / ISO 9001



मानक: पथप्रदर्शकः
BUREAU OF INDIAN STANDARDS



QMS

CONTENTS

Quality Policy	2
Mandate	3
Organisational Structure	4
From the Director's Desk	8
Advisory Council (Research Council and Management Council)	9
Performance Indicators	12

RESEARCH & DEVELOPMENT (R&D) DIVISIONS

Bridge Engineering and Structures	15
Flexible Pavement	23
Geotechnical Engineering	30
Pavement Evaluation	37
Rigid Pavement	47
Transportation Planning and Environment	57
Traffic Engineering and Safety	71

R&D MANAGEMENT DIVISIONS

Information, Liaison & Training	82
Planning, Monitoring & Evaluation	96
Knowledge Resource Centre	100
Computer Centre & Networking	106
Engineering Services	111
Maharani Bagh Staff Quarters Maintenance	136
Mechanical and Transport	144
Quality Management	147

राजभाषा	150
Administration	160
GENERAL INFORMATION	
Important Days Celebrations	163
Workshops / Conferences / Seminars Organised	173
Honours & Awards / Appreciations Received	184
Invited Talks / Lectures Delivered (Outside CRRI)	193
Participation in Conferences/ Seminars/ Workshops / Webinars	207
Participation in Training Programs/Short Term Courses (Outside CRRI)	214
New Facilities / Equipment Procured / Developed	219
Thesis / Dissertation Supervision	223
Visitors to the Institute	246
DeputationAbroad	248
Membership of Staffs in Various Technical Committees	250
Membership of National and International Organisations	254
MoUs, Agreements and Patents	256
Papers in SCI Journals	261
Papers in Peer Reviewed Journals	265
Papers in Seminars / Conferences	266
Articles in Books / Magazines	276
CSIR-CRRI in Media	279
Staff News (Retirements, Joining, Transfer to / from CSIR-CRRI)	299
Academy of Scientific and Innovative Research (AcSIR)-CRRI	307



From the Director's Desk

It am delighted to present the Annual Report of the Institute for the year 2025-2026 which reflects Institute's performance in all aspects including sponsored, collaborative, R&D peojects, consultancy services and all other infrastructure services provided during the year.

During the last fiscal year, our scientists published 59 papers in renowned journals, 130 papers in conference proceedings and 26 articles in Books and Magazines apart from filing various patents. During this period, 5 patents were filed while 13 technologies were transferred to the Industries. Besides these, 7 trademarks were filed while 21 MoUs were signed with various stakeholders for executing the various projects of national importance.

Despite a sharp fall in revenues in the first quarter, progressively strengthening demand for our services helped us stage a swift recovery during the rest of the year, helping clock full year External Cash Flow of ₹54.5 crore in FY 2025-2026.

Scientists of the Institute received many National and International recognitions, served as expert members on important National level committees and contributed in the preparation of Standards/ Codes of Practices/ Manuals/ Guidelines/ Specifications for Indian Roads Congress (IRC) / Bureau of Indian Standards (BIS) / Ministry of Road Transport and Highways (MoRTH), Govt. of India.

CSIR-CRRI hosted a number of events during this period. These include a series of Lectures / Conferences / Seminars / Workshops on various topics related to Roads, Bridges and Road Transportation. Also, the Audits of CSIR-CRRI as per IS/ISO 9001: 2015 requirements were conducted by the auditors of the Certification Agency i.e. Bureau of Indian Standards. The auditors were satisfied with the current system / procedure followed in CSIR-CRRI, which is a testimony to the quality standard maintained by the Institute.

Skill development of human resources by imparting training to the engineers of the user agencies / organizations is an integral part of the research and development programme of our Institute. Past fiscal year has again touched great heights for Vision Forward and the people we serve. CSIR-CRRI conducted seven regular, five customized training programs and one specialized 15-day certification courses in the areas of Road Safety Audit. Customized training programs were organized for the engineers of National Highways & Infrastructure Development Corporation Limited; National Rural Infrastructure Development Agency, Govt. of India and Border Roads Organisation, Govt. of India. These regular and

customized training programs including the certification courses were attended by 445 participants from various parts of India.

We undertook significant international engagement and worked closely with international organisations. It is my pleasure to share that many distinguished Scientists / Academicians, both from India and abroad visited our Institute, delivered lectures, and held discussions with Scientists of the Institute during the year.

CSIR-CRRI also organized various interactive workshops / outreach programs as part of the JIGYASA programme and Atal Tinkering Lab (ATL) scheme under Atal Innovation Mission (AIM) of Govt. of India, for the students of Kendriya Vidyalayas (KVs) and other schools & colleges in India. In the last fiscal year, 1618 students along with their teachers from various KVs and other schools & colleges enthusiastically participated in these interactive workshops, lecture series and /or the quiz competitions.

Students of B. Tech / M. Tech from various Engineering colleges, NITs and IITs have a dream to work for their dissertations in CSIR-CRRI. During the period, 56 students were working for doctoral degree; 96 students completed their M. Tech dissertation / internship and 155 B. Tech students completed their internships / dissertations.

During the period, 6 staff members transferred from CSIR-CRRI and 42 staff members including 18 scientists joined the Institute while 14 staff members retired from CSIR-CRRI.

I express my gratitude towards the Ministry of Science and Technology, CSIR Headquarter and our Research & Management Councils for the wholehearted support received from them. I extend my gratitude to our external experts who guided in our pursuit for excellence.

As I look ahead, I am more optimistic than ever of the enormous opportunity ahead of us. I would like to place on record here an appreciation for the contribution made by CSIR-CRRI staff members at all levels and students. Our consistent growth was made possible by their hard work, solidarity, cooperation and support.

Jai Hind

Dr. Chalumuri Ravi Sekhar
Director, CSIR-CRRI

Advisory Council (Research Council and Management Council)

Research Council

The Research Council of the Institute (as on 31.03.2026) is as follows.

Chairman

Prof. Mahesh Tandon

Tandon Consultants Pvt. Ltd.
17, Link Road, Jangpura Extension,
New Delhi-110014
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External Members

Prof. K. Sudhakar Reddy

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Indian Institute of Technology,
Kharagpur-721302
Email: ksreddy@civil.iitkgp.ac.in

Shri A. Anbarasu

Principal Secretary,
Public Works Department (PWD)
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Email: pspwd@nic.in, Lk-advisor@gov.in

Prof. Lelitha Devi Vanajakshi

Dept. of Civil Engineering
Indian Institute of Technology, Madras
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Ms. Minimol Korula

Head, Strategic Projects, M/s Maccaferri
Environmental Solutions Pvt. Ltd.,
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Pune - 412220
Email: minikorulla@maccaferri-india.com

Agency Representative

Shri Dharmanand Sarangi

Additional Director General (R), MORTH,
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Email: d.sarangi@nic.in

Sister Laboratory

Prof. R. Pradeep Kumar

Director, CSIR-Central Building Research
Institute (CBRI), Roorkee-247667
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Laboratory Director

Dr. Chalumuri Ravi Sekhar

Director, CSIR-Central Road Research Institute
(CRRI), New Delhi-110025
E-mail: director.crrri@nic.in

Director General's Representative

Shri Mayank Mathur

Chief Scientist, CSIR-Central Planning
Directorate (CPD), Council of Scientific and
Industrial Research, 2, Rafi Marg,
New Delhi-110001
Email: mm@csir.res.in

Research Council Secretary

Dr Errampalli Madhu

Chief Scientist, TPE Division
CSIR-Central Road Research Institute (CRRI),
New Delhi-110025 E-mail: madhu.crrri@nic.in

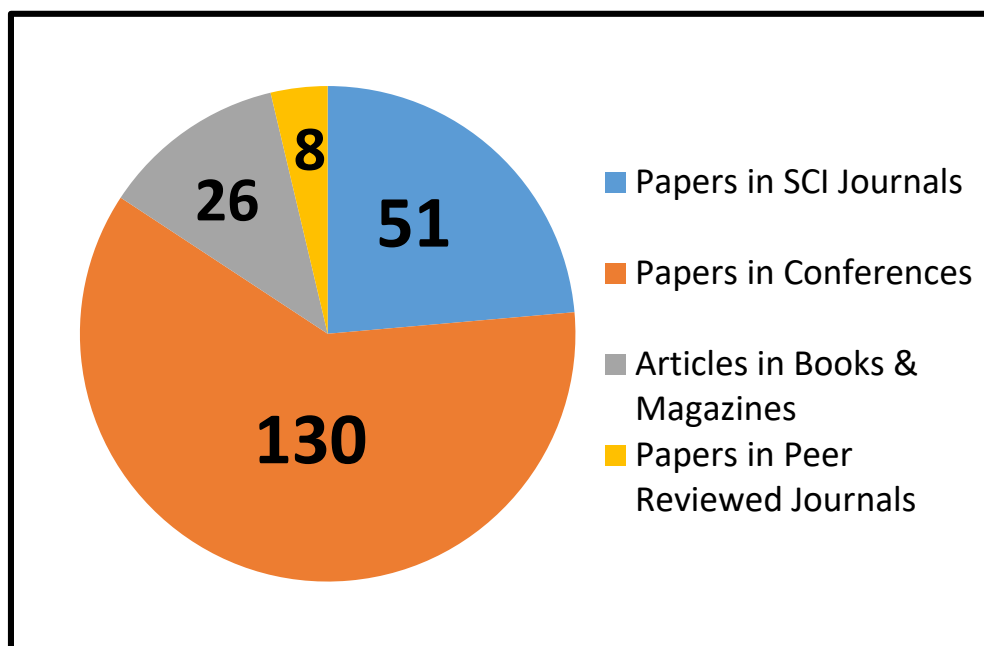
Management Council

Management Council of the Institute (as on 31.03.2026) is as follows.

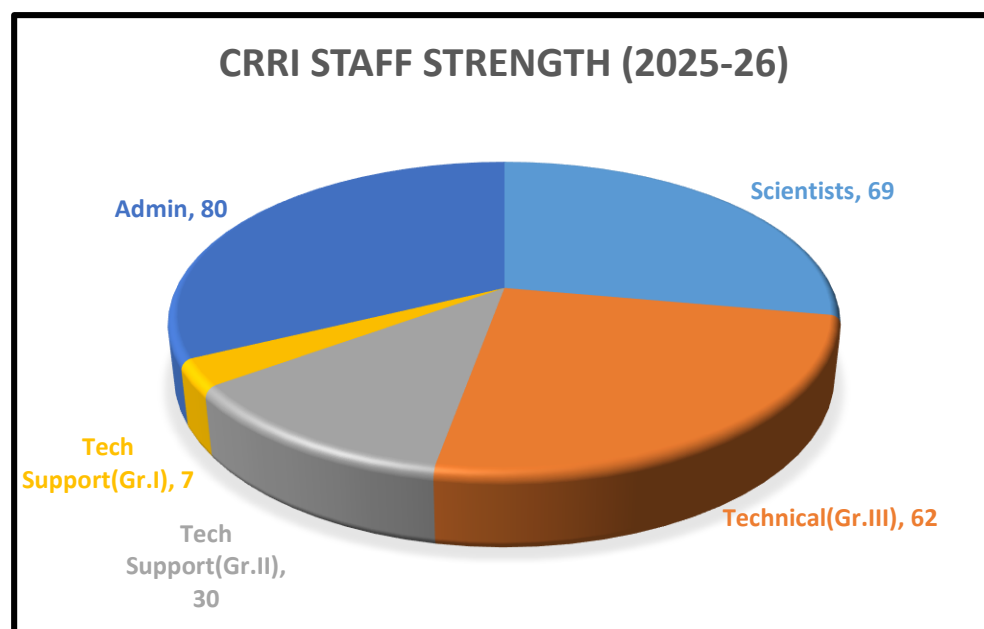
Sl. No.	Name of the Nominee	Alternate Nominee	Position
1.	Dr. Chalumuri Ravi Sekhar, Director, CSIR-CRRI, New Delhi-110025	----	Chairman
2.	Dr. Souvik Maiti, Director, CSIR-IGIB, New Delhi-110025	Prof. R. Pradeep Kumar, Director, CSIR-CBRI, Roorkee-247667	Member
3.	Sh. Manoj Kumar Shukla, Chief Scientist, CSIR-CRRI	Dr. Neelam J. Gupta, Chief Scientist, CSIR-CRRI	Member
4.	Dr. Mukti Advani, Sr. Principal Scientist, CSIR-CRRI	Dr. Reena Singh, Sr. Principal Scientist, CSIR-CRRI	Member
5.	Dr. Parvathi G.S., Principal Scientist, CSIR-CRRI	Dr. G. Bharath, Principal Scientist, CSIR-CRRI	Member
6.	Dr. Vidhi Vyas, Sr. Scientist, CSIR-CRRI	Dr. Sarfaraz Ahmed, Sr. Scientist, CSIR-CRRI	Member
7.	Sh. Mukesh Kumar, Principal Technical Officer, CSIR-CRRI	Smt. Kamla Masih, Principal Technical Officer, CSIR-CRRI	Member
8.	Dr. Vinod Karar, Chief Scientist & Head (PME), CSIR-CRRI	Dr. K. Ravinder, Chief Scientist & Head ILT, CSIR-CRRI	Member
9.	CoFA / F&AO, CSIR-CRRI	----	Member
10.	CoA / AO, CSIR-CRRI	----	Member-Secretary

Performance Indicators

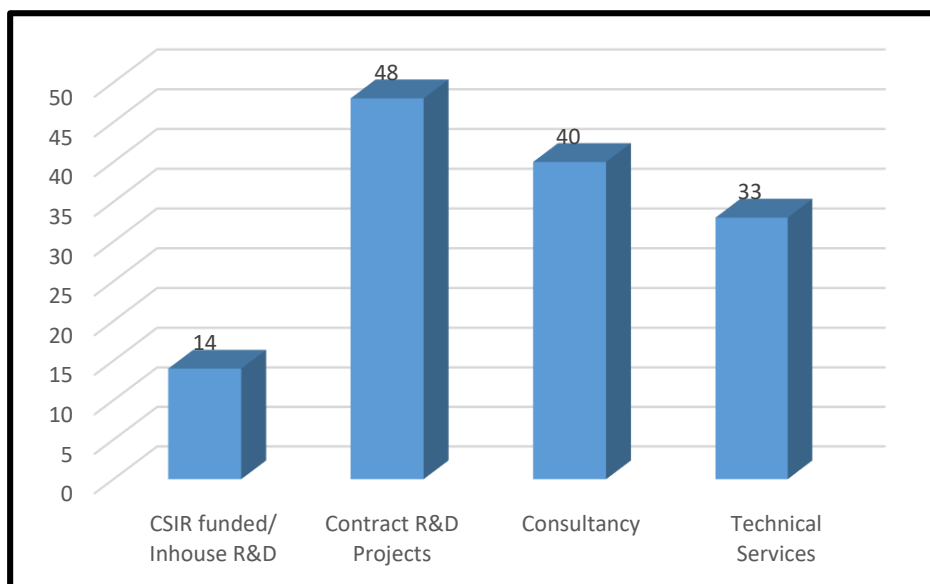
Papers Published in 2025-2026



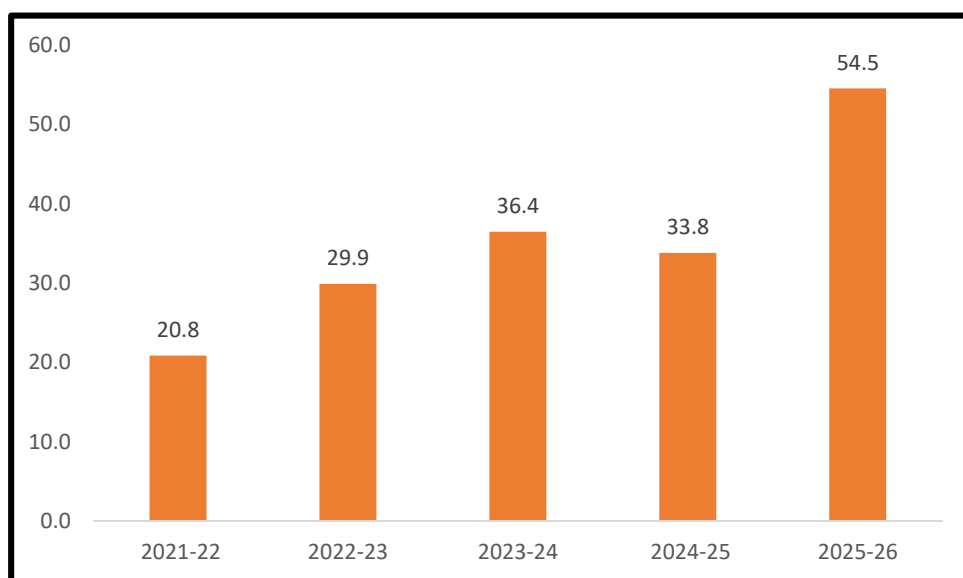
Staff Strength in 2025-2026



Projects Undertaken in 2025-2026



External Cash Flow (Rs. in Crore) in 2025-2026



Research & Development Divisions

- ❑ **Bridge Engineering and Structures**
- ❑ **Flexible Pavement**
- ❑ **Geotechnical Engineering**
- ❑ **Pavement Evaluation**
- ❑ **Rigid Pavement**
- ❑ **Transportation Planning and Environment**
- ❑ **Traffic Engineering and Safety**

Bridge Engineering & Structures

RESEARCH PROJECTS

Investigating the Effectiveness of Innovative FRP-Based Strengthening Solutions for Corroded RC Elements in Bridges and Buildings.

Funding Agency: Department of Science and Technology

Duration of the project: From October 2025, to October 2030

Broad Objectives:

- (a) To investigate the efficiency of different anti-corrosive coatings on corroded RC elements
- (b) To investigate the efficiency of different FRP strengthening configurations on corroded RC elements

Corrosion of steel reinforcement in existing RC buildings and bridges is a major deterioration phenomenon, driven by aggressive environmental conditions and marine environments. Strengthening using CFRP composites has gained popularity over the last two decades to restore the strength lost due to corrosion in RC structures. The concrete repair and corrosion-preventive measures, including anti-corrosive coatings, are widely adopted before strengthening with CFRP composites, as shown in Photo 1. However, conventional practices, such as anti-corrosive painting, are not effective at preventing further progression due to limitations in field application. Most existing research studies focus on understanding the effect of corrosion rate on reinforced members, whereas very limited studies examine its effect on FRP-strengthened members. Thus, the focus of this study is to investigate the effectiveness of different corrosion preventive measures and CFRP strengthening on the corroded RC structural members in buildings and bridges.



Photo 1: Strengthening of Corroded Bridge Girder using CFRP Composites

Development of Smart Bridge Inspection and Rating System.

Funding Agency: CSIR-CRRI

Duration of the project: From November 2025, to November 2027

Broad Objectives: Development of an online platform to enhance bridge inspection efficiency and automatically generates Bridge Rating as per IRC: SP: 35-2024 using artificial Intelligence. It is aimed that with successful completion of this research and development, the online platform could be used conveniently as a replacement to physical and mechanical way of collecting data, mapping of data, processing the data in a very limited time with greater accuracy.

Despite the availability of guidelines such as IRC: SP: 35–2024 for bridge inspection and rating, the current practices in India are predominantly manual, relying on paper-based data collection, subjective

assessments, and time-consuming report preparation. This often leads to inconsistencies, delays, data loss, and reduced reliability in decision-making related to bridge maintenance and safety. The project seeks to address these limitations by developing an integrated web and mobile-based application that enables efficient bridge inspection, real-time data capture, and automated bridge rating using Artificial Intelligence (AI). The platform will facilitate digital recording of inspection data, including photographs with geolocation, distress identification, and component-wise condition assessment. It will also support automatic generation of bridge layout diagrams, structured data mapping, and standardized reporting aligned with IRC provisions.

The project is divided into two major phases. The first phase focuses on the development of the digital platform, including features such as bridge inventory management, inspection workflows, photo annotation, dashboards, and automated report generation. The second phase involves the integration of AI-based bridge rating mechanisms, validation of results, and optimization of the system for enhanced performance. User manuals and training modules will also be developed to facilitate widespread adoption. The workflow is shown in Figure 1.

The anticipated outcomes of the project include the creation of a comprehensive digital ecosystem for bridge inspection and rating, generation of intellectual property, development of a prototype platform, and establishment of a structured database for bridge condition monitoring. The system is expected to significantly enhance inspection efficiency, improve accuracy, and ensure consistency in reporting, thereby enabling informed and timely decision-making for bridge maintenance.

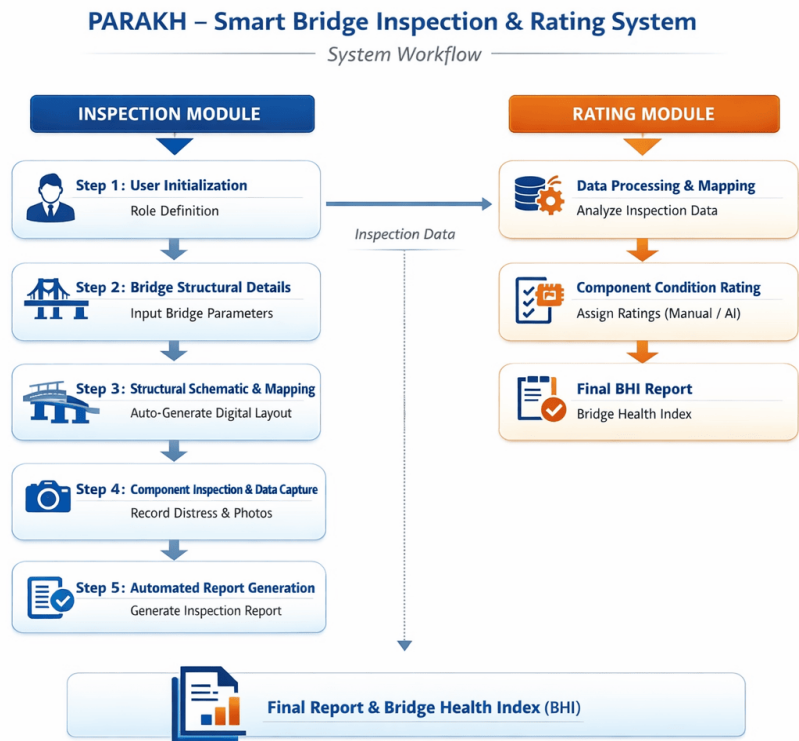


Figure 1: Work flow for the Digital Platformfor Bridge inspection and rating system

Characteristic Analysis of different properties of concrete by using Crystalline Waterproofing Admixture “SikaControl-200WTPIN”

Funding Agency: M/s Sika India Private Limited, Mumbai

Duration of the project: From September 2024 to July 2026

Broad Objectives : Evaluation of Mechanical Properties such as Compressive Strength, Flexural Strength, Change in Length, Initial and Final Setting Time, Compressive Strength-Behaviour, Water Absorption Test and durability tests such as Water Permeability Test at 5 bar and 16 bar pressure, Co-efficient of Water Permeability, Chloride Ion Penetration and Co-efficient of Chloride Diffusion, No Corrosion Effect, Self-Healing effect and Shear Bond Strength by using Crystalline Admixture (0.8% of the cement weight in the concrete Grade M40) as integral waterproofing product and compare with the results of Normal (Plain) Concrete specimen cast from the same concrete mix.

The concrete specimens have been prepared in CRRI (refer Photo 2 (a), (b), (c) & (d)) to evaluate the different properties of the concrete.



Photo 2: (a) View of beams cast to measure the Flexural Strength (b) Casting of specimen for measurement of Corrosion Effect as per ASTM G 109. (c) Plastic pond installed on the top of the specimen to store sodium chloride (d) Measurement of Corrosion Potential is under process (first reading).

Interim Conclusions:

- The standard consistency and Initial setting time are found to be increased approx. 3.65% and 8.69% respectively by addition of Crystalline Admixture in the cement, but the Final setting time is found to be similar in both the conditions.
- The Compressive and Flexural Strength of concrete specimens after curing of 28 days is found to

be increased by approx. 10.2% & 12.8% respectively by addition of Crystalline Admixture in the concrete mix as compared to the specimen cast with plain concrete.

- Test Results of Water Absorption test indicate that the specimen prepared by addition of Crystalline Admixture absorb less water i.e. 9.6% lesser in comparison to the sample prepared with plain concrete.
- The Water Permeability and Co-efficient of Water Permeability is found to be lesser in the specimen cast by addition of Crystalline Admixture in comparison to the specimen cast with plain concrete.
- The Chloride Content and Chloride Diffusion Co-efficient is found to be lesser in the specimen cast by addition of Crystalline Admixture in comparison to the specimen of plain concrete.

Structural Audit of Interchanges, Minor Bridges and Underpasses at Different Location of Yamuna Expressway (From Greater Noida to Agra, 165 Km approx.) in Uttar Pradesh.

Funding Agency: M/s JAYPEE Infratech Limited

Duration of the project: From October 2024 to October 2026

Broad Objectives: To perform the Structural Audit of Yamuna Expressway consisting of total 195 structures including 6 numbers of Interchanges, 41 number of Minor Bridges (MNB), 70 number of Vehicular Underpasses (VUP) and 78 numbers of Cattle Track/ Pedestrian Underpasses (PUP) in Uttar Pradesh.

The comprehensive observations of visual inspection of all the 195 structures of the Yamuna expressway have been made in the interim report. Comprehensive test results of Non-Destructive Test (NDT) and core testing conducted for 45 structures of Yamuna Expressway selected based on the observations of the visual inspection along with the recommendations for the repair/ rehabilitation strategies for all the structures are submitted to the client. The visual inspection of the different structures by MBIU and Non-Destructive Test (NDT) is shown in Photo 3.

The inspection identified a wide range of structural deficiencies across bridge components such as Cracks, leaching, honeycombing, spalling of concrete and exposed reinforcement has been seen. In some of the bearings there are missing and damaged bolts, temporary locks, improper alignment, initiation of rusting, debris accumulation and temporary supports also. Leakage through expansion joints and drainage spouts has been observed at several locations on the structures. Cracks, damaged edges and improper gaps between Restrainers and Girders observed. Vegetation growth also has been observed at the several locations on pier heads and abutment heads, retaining walls, wing walls etc.

From the NDT and Core testing of 45 structures of Yamuna Expressway selected based on the visual inspection observations, it can be concluded that on an average, the concrete used in the construction of the structures of the Yamuna Expressway is conforming to specified grade concrete as mentioned in the structural drawings except at few locations.

Recommendation for repair of several components of the structures of the expressway including deck slabs, piers, abutments, girders, diaphragm, and others are suggested in the report. Since the NDT and core testing has been done on representative basis based on the visual observation of the distresses,

therefore considering the likelihood of appearance of distresses in other structures, it is recommended to the client to perform routine inspection at an interval of six months (before and after monsoon) and detailed inspection of the structures to be done after every three years and adopt appropriate repair/rehabilitate strategy for the structures as suggested in this report. A proper inspection register has to be maintained for the condition assessment of all the structures of Yamuna Expressway. It is also suggested that all the remedial measures should be implemented in one go by the experienced agency having sufficient experience in the area of strengthening/rehabilitation/repairing of bridges.



Photo 3: Different structures of Yamuna Expressway and the means of their NDT

CONSULTANCY PROJECTS

Structural Audit of Two Structures of Six laning work from Saharanpur Bypass to Ganeshpur section of Delhi-Dehradun Economic Corridor under Bharatmala Pariyojna Phase-1 (Pkg-2)

Sponsoring Agency: NHAI, PIU Roorkee, Uttarakhand

Duration of the project: From August 2025 to February 2027

Broad Objectives: To check the safety of the structures before opening to traffic

The work of review of the available documents, Visual inspection, NDT, Concrete Core testing and analysis of the data in respect of about 1 km long elevated bridge at Ch. 36+415 (refer Photo 4) and Major bridge over river at Ch.34+728 (refer Photo 5) has been completed.

Distresses of severe nature were observed in the Deck slabs of both the bridges. Methodology for immediate implementation in Deck slabs have been recommended. Long terms strengthening measures for both the bridges are being designed in consultation with NHAI and Construction agency.



Photo 4: View of Elevated bridge at Ch.36+415



Photo 5: View of Major bridge at Ch.34+728

Load Testing of seven Bridges of Cuttak-Angul Section of NH-55 in the state of Odisha

Sponsoring Agency: NHAI, PIU Dhenkanal, Odisha

Duration of the project: From May 2025 to April 2026

Broad Objectives: To assess whether bridge superstructure can safely take the design loads or not, before opening to traffic

Work of Load testing of one span each of all the seven bridges [CH.3+300 (RHS), CH.8+086 (RHS), CH.25+160 (LHS), Ch.38+787 (LHS), Ch.48+061 (LHS), Ch.75+907 (RHS), Ch.106+00 (LHS)], has been completed and reports have been submitted to the Client. All the load tested spans behaved elastically and recovery of deflections was more than the desired ones.

Flexible Pavement

RESEARCH PROJECTS

Development of Fatigue Performance Model for the Full Depth Recycling Pavement Layer

Funding Agency: CSIR (FBR Project)

Duration of the project: April 2024 to March 2026 (Completed)

Broad Objective: The broad objective of the study is to develop a fatigue performance model for the FDR layer.

The project successfully progressed towards developing a mechanistic fatigue performance model for Full Depth Reclamation (FDR) pavement layers through a combined approach of laboratory investigations and field performance monitoring. Representative FDR materials have been collected from multiple pavement sites, and detailed laboratory characterization has been carried out, including unconfined compressive strength, flexural strength, stiffness evaluation, and mix design optimization for selected material combinations. Preparatory steps for advanced fatigue testing, including the procurement of a four-point bending beam fatigue setup, have also been initiated. In parallel, field studies have been undertaken to monitor the in-service performance of FDR sections, focusing on distress development, surface deflection, drainage behavior, and overall structural response under traffic loading. The integration of laboratory and field datasets has enabled preliminary correlations between material properties, loading conditions, and fatigue performance. These efforts have laid a strong foundation for the development of a predictive fatigue performance model for FDR layers, incorporating the influence of recycled material characteristics and environmental conditions, thereby enhancing the mechanistic understanding and design reliability of FDR pavements under repeated loading.



Photo 6: Flexural Jig for Fatigue Test

Development of Performance Prediction Models for Geosynthetic-Reinforced Pavements

Funding Agency: Ministry of Textiles, NTTM (GAP)

Duration of the project: January 2025 to January 2028 (Ongoing)

Broad Objective: The overall objective of this proposal is to enhance the performance and service life of asphalt pavements by developing a comprehensive permanent deformation performance model and incorporating the structural benefits of geosynthetic reinforcement

The research study focuses on evaluating two types of pavement reinforcement methods: Granular Material Reinforcement and Asphalt Concrete Reinforcement through integrated laboratory, large-scale, and field investigations. For granular reinforcement, base, subbase, and subgrade materials have been collected and characterized, and large-scale test sections have been prepared under different configurations including unreinforced, geocell, geogrid, and double geogrid systems to assess performance in terms of permanent deformation (PD), resilient deformation (RD), rut depth reduction (RDR), traffic improvement factor (TIF), reduction in vertical stress on the subgrade, and potential savings in base layer thickness. For asphalt concrete reinforcement, laboratory studies have been conducted on mixes with different binder grades, modified binders, and glass grids, including evaluation of cracking resistance using Texas Overlay Tester and Cracking Tolerance tests. Additionally, a field trial section has been successfully laid on a State Highway in Andhra Pradesh to evaluate the in-situ performance of glass grid reinforced asphalt layers under real traffic and environmental conditions, and continuous monitoring is being carried out to develop fatigue performance modification factors based on field observations.

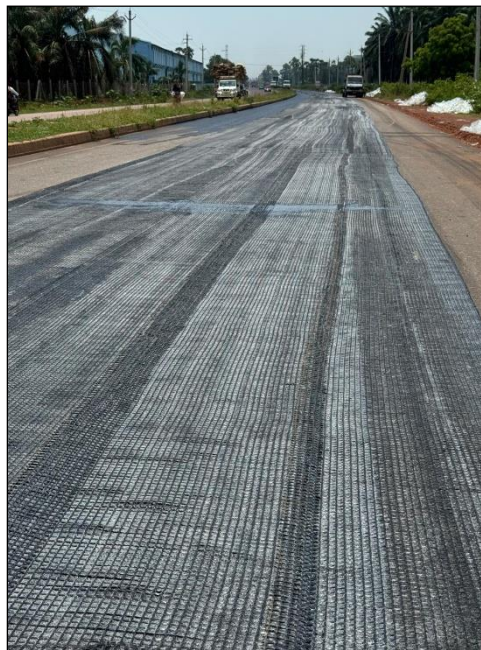


Photo 7: Field Section: SH, Andhra Pradesh

Development of Bio-binders from Agricultural Waste for utilization in Bituminous Road Construction

Funding Agency: Ministry of Road Transport & Highways, MoRTH, Collaborative Project: CSIR-IIP (GAP)

Duration of the project: March 2026 to March 2029 (Ongoing)

Broad Objective:

The main objective of this project work is to develop Bio-binder from biomass to supplement petroleum-based bitumen for the bituminous road construction process.

The project focuses on the development and evaluation of bio-binders derived from lignocellulosic biomass through a comprehensive program of laboratory investigations and field validation. Initially, detailed physico-chemical characterization of feedstocks such as rice straw, cotton stalk, and other biomass (based on availability) is carried out, followed by pyrolysis and optimization of process parameters to produce high-quality bio-oil suitable for binder applications. The produced bio-binders are

subjected to extensive aging, rheological, and chemical characterization using advanced techniques such as chromatographic analysis and Fourier Transform Infrared Spectroscopy (FTIR), along with evaluation of bonding characteristics with aggregates and determination of mixing and compaction temperatures. Performance assessment includes rutting and fatigue evaluation through MSCR and LAS tests, as well as mix-level performance in terms of permanent deformation and cracking resistance. Based on laboratory performance, technical specifications will be developed and the benefits of the technology will be disseminated to the paving industry. Further, field trials involving approximately 1 km stretch using optimized bio-binders (with partial replacement of conventional bitumen) will be conducted, followed by long-term performance monitoring for two years to support Life Cycle Cost Analysis (LCCA). Additionally, a comparative assessment of greenhouse gas emissions between bio-binders and conventional asphalt binders will be carried out to evaluate environmental sustainability.

Field Test Section of Asphalt-Rubber Pavement System: Design, Construction, and Performance Monitoring

Funding Agency: NHAI- Collaborative Project: IIT Tirupati, IIT Palakkad, NIT Rourkela (GAP)

Duration of the project: November 2025 to November 2028 (Ongoing)

Broad Objective: The major objective of this proposed study is to develop guidelines and performance-based specifications for the design, construction, and performance monitoring of AR pavements in India by constructing a comprehensive set of field test sections fully instrumented to obtain real-time pavement responses through continuous field monitoring and assessment.

The project aims at the systematic development and comprehensive evaluation of Asphalt-Rubber (AR) pavement systems through an integrated approach involving field implementation, laboratory investigations, and advanced performance monitoring. Initially, suitable sites across diverse climatic and traffic conditions in India will be identified for the construction of representative field test sections. Detailed material characterization and laboratory mix design will be undertaken to optimize AR mixtures tailored to Indian conditions. Subsequently, instrumented field sections will be constructed to capture real-time pavement responses under actual traffic loading and environmental variations. Controlled experiments will also be carried out at the test track facility at IIT Tirupati under the NATPaVeD program to simulate accelerated loading and evaluate pavement performance under controlled conditions. A comprehensive performance monitoring framework will be established to assess both structural and functional performance over time. The data generated will be utilized to develop distress prediction models and to carry out Life Cycle Assessment (LCA) and Life Cycle Cost Analysis (LCCA) for evaluating sustainability and economic viability. The outcomes of the study will culminate in the development of performance-based guidelines and specifications for the design, construction, and implementation of AR pavements in India.

Exploring the Potential of Simple and Practical Tests for Performance Evaluation of Gap-Graded Asphalt Mixtures

Funding Agency: CSIR-CRRI (In-house)

Duration of the project: March 2026 to March 2028

Broad Objective: Evaluate and establish simple, practical, and reliable performance testing approaches for assessing the rutting and cracking resistance of gap-graded asphalt mixtures.

Gap-graded asphalt mixtures, particularly Stone Matrix Asphalt (SMA), are widely used for their ability to perform under heavy traffic and high-temperature conditions. The SMA is used in high-volume and heavy-load applications. However, current mix design and QC/QA practices in India are primarily based on conventional methods, which may not adequately capture the true performance behavior of these mixtures. This concern is more pronounced for gap-graded mixtures. With the growing emphasis on the Balanced Mix Design (BMD) approach, there is an increasing need to incorporate performance-oriented

evaluation methods into practice. While several testing approaches exist, their broader applicability and practicality in routine scenarios remain a concern. Therefore, there is a need to explore suitable, practical approaches for evaluating gap-graded asphalt mixtures to enhance the reliability of mix assessment during the design and production stages. The outcomes of this study are expected to support the construction of more durable and long-lasting asphalt pavements by enabling the use of simple and practical approaches within QC/QA processes.

Development of Performance Grade (PG) bituminous binder classification system for India

Funding Agency: MoRTH (GAP)

Duration of the project: October 2023 to October 2026

Broad Objective: The proposed research project, a combination of field investigation and laboratory-based studies has the following components:

- Development of a database of air temperature and pavement temperature across the country (through limited field instrumentation, and predictive algorithms),
- Development of a database of properties of various bitumen (capturing time, spatial, and chemical variation) over the range of testing conditions as per current VG and PG schemes

Currently, in India, asphalt binder is specified as viscosity grade (VG). In this scheme, a range of tests is carried out to measure its properties. Finally, asphalt binder is graded primarily based on the viscosity measured at a temperature of 60oC. This is based on the premise of equivalencies between average maximum summer temperature and testing temperature. Variability in actual pavement temperature is influenced by factors such as location, environment, and weather conditions. To address this issue of satisfactory performance of pavement (under extreme temperature; at a particular location), it is required to provide the framework to transition from Viscosity Grading (VG) to Performance Grading (PG) specifications for bitumen. The research project will be carried out jointly by CSIR-CRRI and IIT Delhi. As part of the project, comprehensive field instrumentation has been successfully installed at Jaisalmer, Leh, Delhi, Kanpur, Nagpur and Trivandrum. These sites were selected to capture a wide spectrum of extreme environmental conditions, including hot arid, cold desert, composite, and hot humid climates. Design air temperature maps for India have been developed to delineate climatic zones and support the selection of appropriate Performance Grade (PG) binders based on region-specific temperature conditions.

Feasibility of Using Reclaimed Asphalt Pavement (RAP) Material in High Performance (HiPER) Bituminous Mixes for Sustainable Road Construction

Funding Agency: CSIR (RDSF)

Duration of the project: April 2024 to March 2026

Broad Objective: The broad objective of this project is to evaluate the feasibility of using reclaimed asphalt pavement (RAP) material in High performance (HiPER) Bituminous mixes for Sustainable Road Construction.

This study explores the feasibility of using RAP material in high-performance mixes (HiPER) for sustainable road construction. Recycled binder was blended at various dosages with virgin Viscosity Grade (VG 40) binder to meet the physical property requirements of high-performance binders suitable for recycled HiPER mixes. A control HiPER mix was prepared using an industry-produced hard-grade bitumen (IGB) and used as a reference for evaluating the performance of mixes containing RAP. Mechanical properties such as resilient modulus and indirect tensile strength (ITS) were assessed to evaluate the stiffness and strength of the mixes. Performance parameters, including rutting resistance, cracking resistance, fatigue cracking, and moisture susceptibility, were evaluated using the wheel tracking

test, Cracking Tolerance Index (CTIndex), and Tensile Strength Ratio (TSR), respectively. Further workability of all mixes was evaluated using a gyratory compactor. The results indicate that increasing RAP content enhances resilient modulus and significantly improves rutting resistance. HiPER mixes with up to 40% RAP content using VG 40 binder achieved rut depths well below the allowable limit, indicating strong rutting resistance. From a cracking resistance perspective, up to 30% RAP can be effectively incorporated in HiPER mixes. All HiPER mixes met the minimum TSR requirement of 80%, indicating acceptable moisture resistance. Additionally, all HiPER mixes meeting the requirements of IRC: SP:139-2023 from a workability perspective. Based on the laboratory performance studies, around 30% RAP with VG 40 binder can be effectively used to produce HiPER mixes.

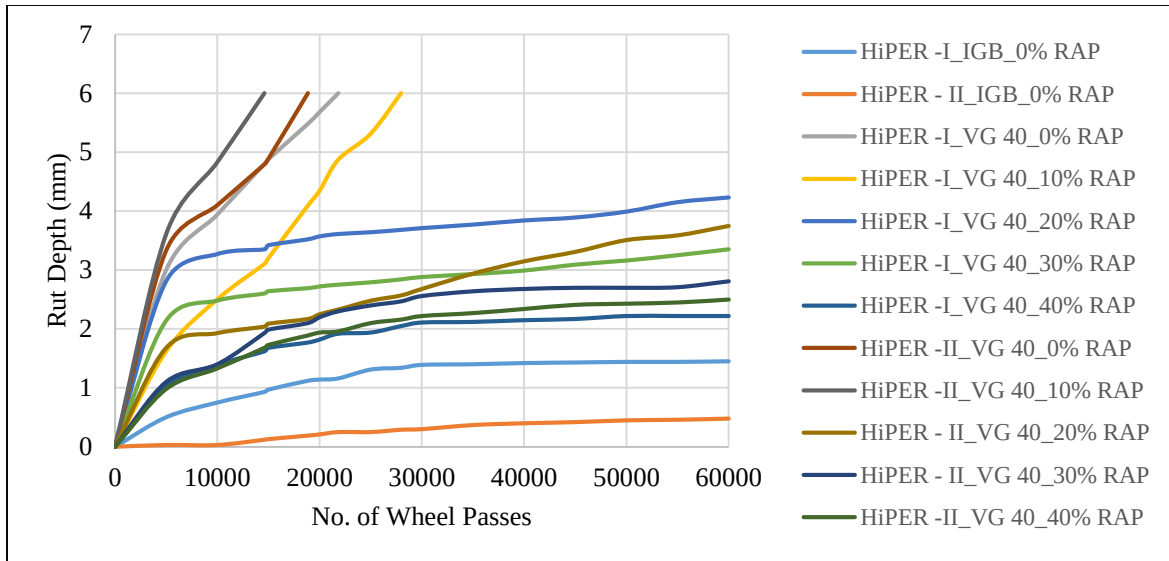


Figure 2

Proposal for Modernization and Infrastructure Upgradation of R&D Facilities in Flexible Pavement Division

Funding Agency: CSIR-CRRI (In-house)

Duration of the project: February 2022 to January 2026

Broad Objective: The overall objective is to upgrade/modernise the R&D infrastructure facilities through procurement of equipment/software, and operation, upkeep and maintenance of various equipment available in flexible pavement division.

The division is involved in R&D studies and technical projects related to pavement design, investigation of pavement failures, evaluation of pavement materials, development of processes and technologies for new paving materials, construction and performance evaluation of pavements with new technologies, and characterisation of special and unmodified bitumen. To strengthen the capabilities in FPD to undertake contemporary, complex and large R&D challenging and fraternity supporting projects, it is imperative to upgrade and modernise the R&D facilities and testing materials. Photos of few procured equipment is shown below.



Rice Apparatus



Large Size Oven



Compression Testing Machine



Marshall Compactor



Humidity Chamber

Photo 8

Geotechnical Engineering

RESEARCH PROJECTS

Development of ‘Biodegradable Prefabricated Vertical Drain’ by Molding Technique– A Sustainable Solution for Road Construction Over Soft Soil

Funding Agency: CSIR under FBR Scheme

Duration of the project: From 01/04/2024 to 31/03/2026

Broad Objectives:

- (a) Development and Physical, mechanical, and biodegradability characterization of the BPVD and optimization of the fabrication process.
- (b) Performance studies of BPVD in varying soils, confining pressure, hydraulic gradient etc., using laboratory physical modelling.

This project focuses on developing an eco-friendly Prefabricated Vertical Drain using natural fibers as an alternative to conventional synthetic PVDs. Industry interaction was established by collecting samples from geotextile manufacturers such as Techfab and Birla Jute Mills and visiting facilities to assess production feasibility. The main objectives included developing binder formulations, designing a fabrication process for eco-friendly PVDs using natural fibers, characterizing mechanical and hydraulic properties, conducting laboratory performance studies, and performing techno-economic comparisons with synthetic PVDs.

A final PVD prototype was successfully developed, consisting of a permeable natural fiber filter wrapped around a corrugated, eco-friendly core. UV exposure tests showed that the core retained tensile strength, while the filter experienced moderate degradation but remained structurally functional. Extensive characterization of filter materials was carried out. Filters showed significant improvement in tensile strength (18-31 kN/m) compared to control samples. Thickness ranged from 0.14 to 1.10 mm, while permeability values generally satisfied recommended geotextile requirements. Increasing binder content reduced permeability but improved structural stability. Optimized configuration and binder content were selected based on optimal tensile strength and compliance with MoRTH specifications.

Core characterization indicated competitive performance compared with synthetic counterparts. The developed core had a thickness of 3 mm, a tensile strength of 1.8 kN/m, and a compressive strength exceeding 2000 kPa, exceeding those of typical synthetic cores. The assembled PVD exhibited intermediate compressibility between synthetic and conventional natural PVDs, demonstrating improved structural stability over traditional drains. Discharge capacity tests confirmed that developed PVDs performed better than the synthetic PVDs. Large-scale consolidation cell tests were conducted to simulate field conditions using soft clay soil. The setup enabled measurement of settlement, pore-pressure dissipation, and consolidation performance under controlled loading.

Industry stakeholders expressed interest in scaling up production. The project aims to transfer technology for industrial manufacturing and explore startup opportunities. Economically, the developed PVD is expected to reduce imports and support sustainable initiatives such as Make in India. Social benefits

include employment generation for rural communities and MSMEs. Future work includes scaling up the factory production and field performance monitoring of the eco-friendly PVDs.

A five-day training program on "The Application of Geo-synthetics in Road Infrastructure Projects"

Funding Agency: Ministry of Textiles, Government of India

Duration of the project: 16th to 20th November 2025 and 15 to 19th December 2025

Broad Objectives: To provide a holistic learning experience, incorporating both theoretical knowledge and practical applications of geo-synthetics in road infrastructure projects.

The five-day course aimed to cover topics such as reinforced soil structures, pavement stabilization, drainage solutions, and the practical applications of geosynthetics in road infrastructure projects for the targeted students. The program featured technical sessions, hands-on training, and expert discussions led by leading scientists and industry professionals. Additionally, doubt-clearing sessions with students and assessment evaluations in the subject were well organized, successfully achieving the mandate of the General Guidelines for Skill Development and training of candidates in technical textiles.



Photo 9: Group Photos with all trainee students (16th to 20th November 2025 at NIT Warangal)



Photo 10: Group Photos with all trainee students in the Inaugural Function (15th to 19th December 2025 at Odisha University of Technology and Research (OUTR), Bhubaneswar, Odisha).

Failure Cyclic interfacial response of geosynthetic reinforcements with marginal/Industrial waste materials for highway applications

Funding Agency: CSIR- (RDSF)

Duration of the project: From April 2024 to March 2026

Broad Objectives:

- (a) To investigate the response of unconventional material at defined cyclic stress ratio & loading cycles under elemental scale.
- (b) To evaluate the interface strength between geosynthetic reinforcement and unconventional material

The project includes a comprehensive evaluation of the cyclic and interfacial performance of unconventional materials (UCM) derived from marginal and industrial waste sources for sustainable highway applications. Element-level cyclic triaxial tests were conducted to assess the deformation characteristics, stiffness evolution, and failure response of UCM under defined cyclic stress ratios and prescribed loading cycles simulating traffic-induced stresses. In addition, large-scale model testing through scaled plate load tests was performed to evaluate the performance of pavement sections constructed with UCM, both with and without geosynthetic reinforcement.



(a)



(b)

Photo 11: (a) Cyclic test on waste foundry sand; and (b) Cyclic plate load test on reinforced and unreinforced model pavement layers

The results demonstrated that geosynthetic-reinforced sections exhibited significantly improved performance under cyclic loading conditions. Reinforced systems showed reduced permanent deformation, enhanced load-carrying capacity, improved resilient response, and delayed failure compared to unreinforced sections. The interface interaction between geosynthetics and UCM contributed to improved confinement and stress distribution, thereby enhancing the overall structural stability of the pavement layer. The findings provide strong experimental evidence supporting the use of geosynthetic reinforcement in conjunction with marginal and industrial waste materials for sustainable and performance-based pavement design under repeated traffic loading.

Comprehensive Condition Assessment and Remediation Strategies for Six Lane Access Controlled Eastern Peripheral Expressway (NE 2)

Funding Agency: NHAI

Duration of the project: From August 2025 to June 2026

Broad Objectives:

- (a) Post-construction technical investigation of drainage systems and reinforced soil walls, along with an assessment of embankment stability,
- (b) Post-construction technical evaluation of the concrete pavements,
- (c) structural and functional evaluation of the expressway including riding quality, skid resistance and load transfer efficiency of the joints,
- (d) Structural investigation of bridges.

The project pertains to the comprehensive condition assessment and formulation of remedial measures for the six-lane access-controlled Eastern Peripheral Expressway (EPE), undertaken for the National Highways Authority of India. This strategically important expressway forms a major segment of the eastern arc of the Delhi peripheral network and plays a vital role in improving regional mobility while reducing traffic congestion in the National Capital Region. The present assignment was aimed at assessing the post-construction condition of the corridor through an integrated examination of pavement performance, embankment behavior, drainage condition, and reinforced soil wall systems. Based on detailed site inspections, subsurface investigations, laboratory testing, and engineering evaluation, the distress conditions along the package were systematically documented and interpreted. The study further provided scientifically derived remedial measures to address the identified deficiencies and to improve the long-term serviceability, safety, and performance of the project stretch.



(a)



(b)

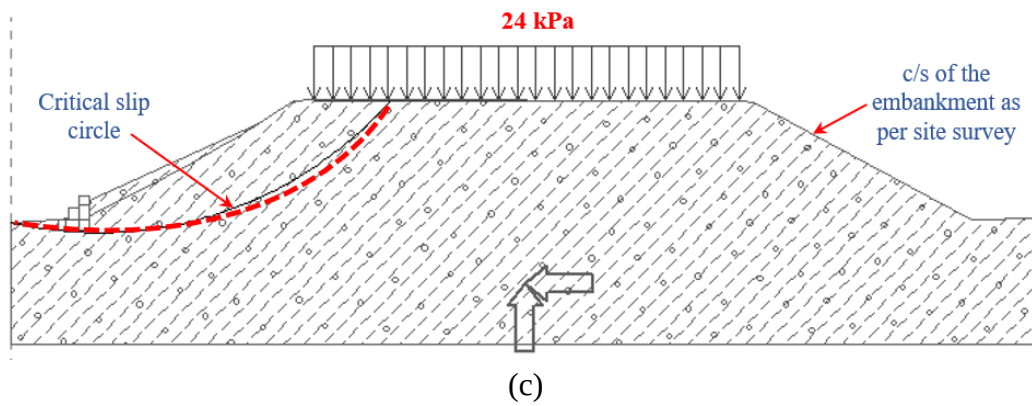


Photo 12: (a) Condition Assessment of High Embankments; (b) Detailed Borehole Log Investigation for Highway Embankments; and (c) Remedial Measure Design for Prolonging the Service Life of Highway Embankments.

CONSULTANCY PROJECTS

Assessment of Waterlogging Problems in NH 11 & NH 148 B and Recommendations for Suitable Mitigation Measures

Funding Agency: NHAI

Duration of the project: From May 2025 to May 2026

Broad Objectives: Assessment of waterlogging problems on NH-11 and NH-148B

The project involved the assessment of waterlogging problems on NH-11 and NH-148B in Haryana and Rajasthan, and the development of suitable mitigation measures for the affected underpass and road locations. The study covered six identified waterlogging-prone sites, where recurring inundation was affecting roadway serviceability, traffic movement, and pavement performance. The Geotechnical Engineering Division carried out field visits and visual assessment of all six locations, geotechnical investigation and soil testing, topographical survey with cross-sections at 20 m intervals, measurement of invert levels of existing drains, and collection/consideration of rainfall data for drainage design. Based on the site conditions and hydrological assessment, CRRI recommended location-specific remedial measures, including design of drains with suitable alignments, profile correction, and additional technical recommendations for long-term drainage management.



Photo 13: Waterlogging in Highway Underpasses

Pavement Evaluation

RESEARCH PROJECTS

Condition Assessment Using Modern Data Collection Techniques and Preparation of Annual Maintenance Plan Using HDM-4 of Odisha PWD Roads

Funding Agency: Public Works Department, Government of Odisha

Duration of the Project : 2023 – 2026

Broad Objectives: (a) Road inventory and pavement condition survey of 22,866 lane km road network in Odisha (State Highways – 28%, Major District Roads – 12%, Other District Roads – 60%) using modern data collection techniques.

(b) Development of Annual Maintenance Plan (AMP) using HDM-4 for optimized and economically efficient maintenance planning.

A comprehensive data-driven Road Asset Management (RAM) framework was implemented for the Odisha PWD road network covering 22,866 lane km across 12 administrative circles. The project involved large-scale collection of road inventory, pavement condition, structural strength (FWD), traffic, and axle load data using advanced survey technologies.

All data were integrated into a centralized GIS-based platform (ORAMS), enabling standardized and transparent asset management. Using this database, HDM-4 analysis was carried out for pavement performance prediction, life-cycle cost analysis, and economic evaluation as shown in Figure 3. The study enabled prioritization of maintenance interventions based on economic indicators such as NPV, IRR, and BCR, ensuring optimal allocation of limited budgets. Results indicated that preventive and thin overlay treatments provide high economic returns and significantly improve pavement performance, while delayed heavy rehabilitation is less efficient. The state-level distribution of the annual road maintenance budget and the progression of average roughness (IRI_{av}) under alternative maintenance and rehabilitation strategies are presented in Figures 1a and b, respectively.

The project successfully demonstrated a transition from reactive to performance-based maintenance planning, leading to improved road condition, reduced vehicle operating costs, and enhanced sustainability of the road network. The developed framework serves as a scalable model for other states in India.

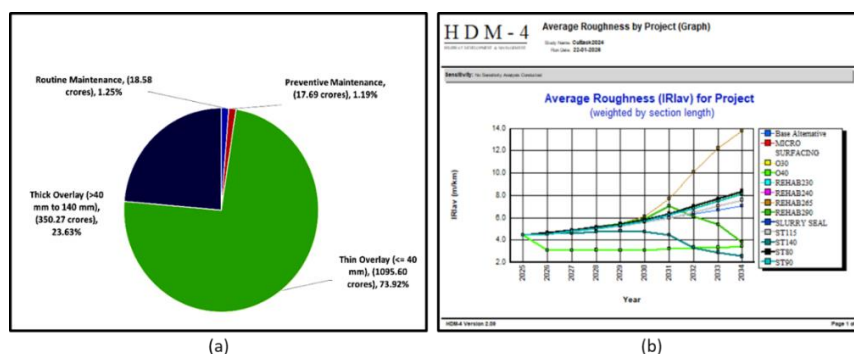


Figure 3 (a) State-level distribution of annual road maintenance budget (b) Average roughness (IRI_{av}) progression under alternative maintenance and rehabilitation strategies

Failure Investigation of Srirampur to Khowai Section of NH-208 (Package-V) in the state of Tripura (chainage Km 75.700 to Km 101.300) and its remedial measures

Funding Agency: NHIDCL, RO Agartala, Tripura

Duration of the project: 2025 to 2026

Broad Objectives: The main aim of this project is to investigate the causes of pavement failure on the Srirampur–Khowai section of NH-208 and recommend effective remedial and strengthening measures.

The project adopts a systematic pavement evaluation methodology combining field, laboratory, and analytical investigations to diagnose failure mechanisms. Initially, a reconnaissance survey and detailed visual condition assessment (walk and drive surveys) are carried out to map surface distresses such as cracking, rutting, and settlements. Based on these observations, representative locations are selected for test pits and core extraction to determine layer composition, thickness, and in-situ conditions. Material samples from different pavement layers (bituminous, base, and subgrade) are collected and tested in the laboratory to evaluate their engineering properties, gradation, and strength characteristics. In addition, structural capacity of the pavement is assessed using non-destructive testing like Falling Weight Deflectometer (FWD), followed by back-calculation of layer moduli. The integrated analysis of field observations, laboratory results, and structural evaluation is then used to identify root causes of failure and to develop appropriate rehabilitation and strengthening strategies. Few photographs related to the field investigation are shown in Photo 14.



Photo 14: Distressed pavement and site investigations

A Framework for Life Cycle Assessment of Hot and Cold Recycling technology

Funding Agency: CSIR

Duration of the project: 01-04-2024 to 31-03-2026

Broad Objectives: (a) To develop a framework for the Life Cycle Assessment of various pavement rehabilitation techniques viz. Conventional Hot Mix construction, Hot Mix Recycling in the bituminous course and Cold Mix Recycling in the base course

(b) To provide decision tools to pavement authorities on the choice of alternative pavement rehabilitation techniques

Cold Central Plant Recycling (CCPR) is gaining popularity in India since this allows the flexibility of using high RAP percentages in the pavement base layers and hence successfully replacing conventional granular layers. In India not much research has been carried out on quantifying their environmental benefits using decision-making tools such as Life Cycle Assessment (LCA). The current study performed a comparative evaluation of environmental impact of conventional hot mix asphalt pavement and recycled pavement. The LCA methodology involved two stages: life cycle inventory (LCI) and life cycle impact assessment (LCIA). The LCI deals with the input data related to the different activities during the production, construction and maintenance phases of a pavement. The data required for LCI was collected from different sources through surveys, literature and contractors. In LCIA, the potential impact from each inventory emission was modeled quantitatively following the relevant environmental mechanism using a characterization model. Various LCIA methods were used in the study for quantifying and comparing the impacts of the selected alternative rehabilitation strategies, such as IPCC, ReCiPe method, CED method etc. The results obtained using multiple impact assessment methods consistently indicate that recycled pavement resulted in almost 30% lower environmental impacts compared to HMA pavement as shown in Figure 4. The reduction in impacts is primarily attributed to the utilization of reclaimed asphalt pavement (RAP), lower energy consumption during material production, and reduced dependence on virgin aggregates and bitumen.

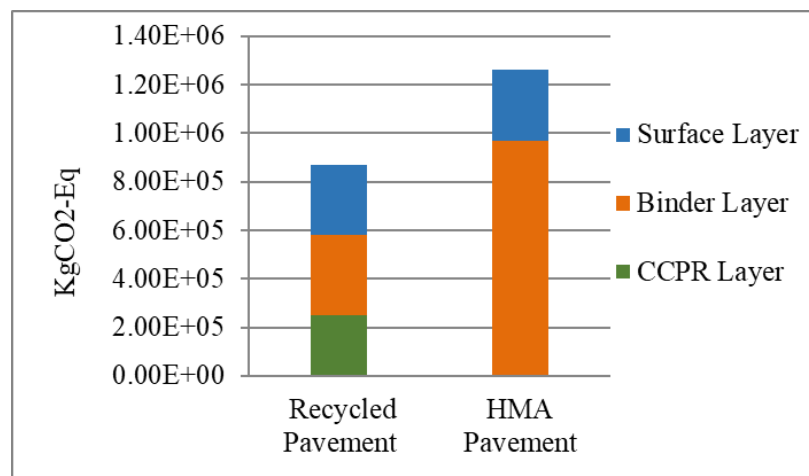


Figure 4 Layer-wise Comparison of CO₂ emissions (kg CO₂-eq) for Recycled and HMA Pavements [IPCC (2021) method: GWP impact category]

Evaluation of Aizawl-Thenzawl-Lunglei Road in the State of Mizoram to Recommend Strengthening Requirements

Funding Agency: PWD, Mizoram, Aizawl

Duration of the project: 2025-2026

Broad Objectives: The aim of the study is to carry out necessary field and laboratory testing to evaluate the Aizawl-Thenzawl-Lunglei Road in the State of Mizoram and suggest the strengthening requirements/needed remedial measures.

To suggest rehabilitation measures for the project road, both field and lab investigations were carried out, including test pit observations and material characterization, extraction of bituminous cores, assessment of bituminous pavement surface distress by visual observations and pavement structural strength through Falling Weight Deflectometer (FWD) testing. Detailed laboratory investigations included assessing the engineering properties of materials, retrieved from different layers of the existing pavement structure at CSIR-CRRI laboratory. After thorough examination of the field and lab results, appropriate strengthening strategies were recommended. The following photographs in Photo 15 show glimpses of field and laboratory work that were carried out.

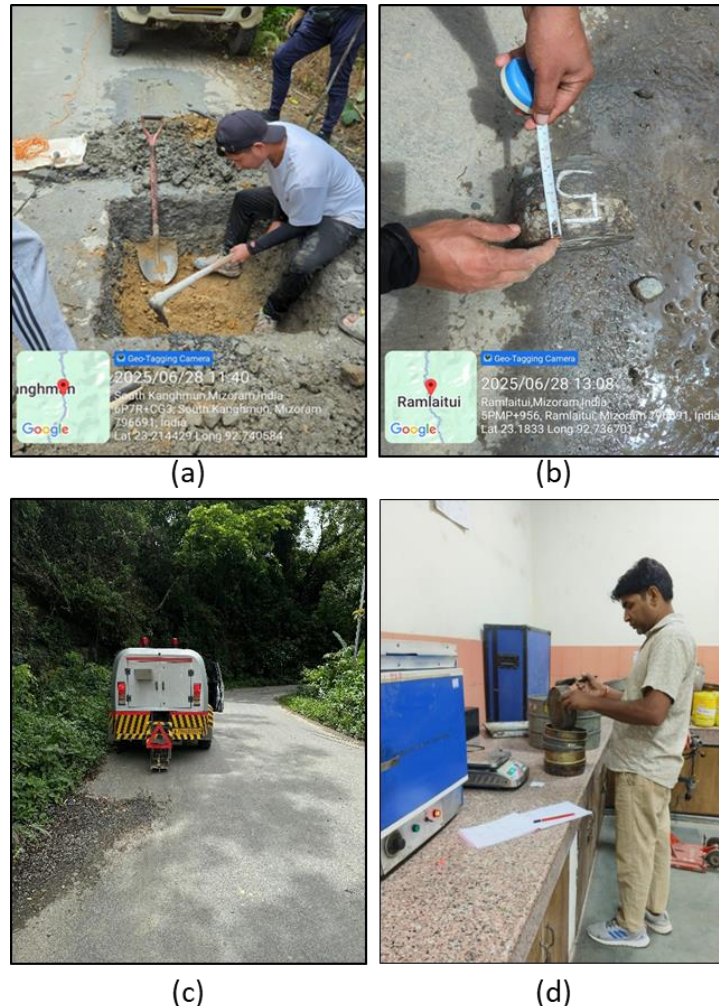


Photo 15: (a) Test pits (b) cores (c) Network Survey Vehicle (d) Laboratory investigation

Impact of road roughness on energy consumption of electric vehicles

Funding Agency: CSIR Headquarters

Duration of the project: 2025-2026

Broad Objectives:

- (a) To evaluate the roughness levels of different road sections and quantify the corresponding energy consumed by electric vehicles;
- (b) To establish predictive models that describe the relationship between energy consumption in EVs and road roughness.

This study examines the impact of pavement roughness on the energy consumption of electric vehicles (EVs) in Indian road conditions. Road roughness, measured using the International Roughness Index (IRI), influences vehicle performance by increasing rolling resistance and inducing vibrations, which lead to additional energy losses. While this effect is well documented for conventional vehicles, its implications for EV battery consumption are particularly critical due to limited battery capacity and the importance of maximizing driving range. To investigate this relationship, field studies were conducted on selected road stretches in the Delhi NCR region representing varying levels of pavement roughness. Three electric vehicles Tata Express-T EV, Tata Punch EV, and MG ZS EV were used for data collection. Pavement roughness was measured using a Roughometer III, while vehicle energy consumption and related parameters such as speed, distance travelled, and tyre pressure were recorded simultaneously under controlled driving conditions. The collected data were analyzed using multiple linear regression to establish a relationship between battery consumption and influencing factors. The developed model showed a high degree of accuracy ($R^2 = 0.935$), indicating a strong correlation between the variables. Among the factors studied, pavement roughness was found to significantly increase energy consumption due to higher rolling resistance and energy dissipation through vehicle dynamics. The study concludes that poor road conditions can substantially reduce EV efficiency and driving range, thereby increasing operational costs and energy demand. It highlights the importance of maintaining smoother pavements not only for improving transportation efficiency but also for supporting sustainable electric mobility.



Photo 16: IRI survey using Roughometer III equipped within EV

Investigation for Causes of Pre-mature Distresses on NH-754K from Rajasthan / Gujarat Border to Santalpur Section (Km. 99.00 to Km. 130.073) for Amritsar-Jamnagar Economic Corridor (AJ/RGBS-Package-4) in the state of Gujarat on EPC Mode and to suggest Remedial Maintenance & Rehabilitation (M&R) Measures

Funding Agency: M/s CDS Projects Ltd.

Duration of the project: 2025 to 2026

Broad Objectives: The primary objective of this study is to systematically investigate the premature distresses observed on the NH-754K project stretch and to develop appropriate remedial measures for its rehabilitation and long-term performance improvement

This project involves a detailed investigation of premature pavement distresses on a 31.073 km stretch of NH-754K under the Amritsar–Jamnagar Economic Corridor in Gujarat. The pavement was designed as a flexible pavement with a crust composition of 50 mm BC, 50 mm DBM, 100 mm Aggregate Interlayer (WMM), 200 mm Cement Treated Base (CTB), and 150 mm Granular Sub-base (GSB). Despite being a relatively new six-lane highway, several sections exhibited early deterioration such as rutting, raveling, cracking, and shoving, necessitating a comprehensive assessment. CSIR-CRRI undertook field surveys, test pit investigations, core extraction, and laboratory evaluation of materials, structural assessment using FWD, and traffic and axle load studies to diagnose the underlying causes.

The study revealed significant variability in pavement condition across the stretch, ranging from good to failed sections. Distresses such as severe rutting, shoving, and alligator cracking indicated structural deficiencies, while widespread raveling pointed to material and surface-related issues. Based on an integrated analysis of field and laboratory findings as shown in Photo 17, appropriate maintenance and rehabilitation measures have been recommended to restore structural integrity, improve riding quality, and ensure long-term performance of the corridor.



Photo 17: (a) Falling Weight Deflectometer (FWD) survey (b) Sand replacement test to determine densities within test pit

Evaluation of NDMC Roads for Suggesting Recommendations for Suitable M & R Measures under the Jurisdiction of Connaught Place, R-I, R-II, R-IV and R-V Divisions

Funding Agency: New Delhi Municipal Corporation

Duration of the project: 2025 to 2026

Broad Objective: The main objective of the project is to determine the possibility of lowering down the existing level of carriageway of project roads by cold milling process and to recommend suitable overlay thickness.

This study focuses on assessing the condition of 79 selected roads under the jurisdiction of the Connaught Place, R-I, R-II, R-IV, and R-V Divisions in Delhi. In light of continuous overlays raising carriageway levels and affecting drainage systems, the CSIR-Central Road Research Institute (CRRRI) was engaged by NDMC to explore the potential for reducing pavement levels through milling and to recommend appropriate strengthening measures. Field evaluations were conducted between February and March 2025 and included visual condition surveys, roughness measurements (using Roughometer-III), and core extraction to examine internal cracking as shown in Photo 18.

The study aimed to determine the existing surface conditions, calculate Pavement Condition Index (PCI) values using IRC guidelines, and identify suitable overlay and milling strategies. Based on a comprehensive assessment, roads were categorized into different maintenance needs such as routine, preventive, periodic, and minor rehabilitation. The final recommendations include detailed M&R treatments such as overlay thickness, milling depth, and materials (e.g., SMA, DBM, BC), tailored to improve riding quality, ensure structural integrity, and maintain uniformity across NDMC's high-profile road network.

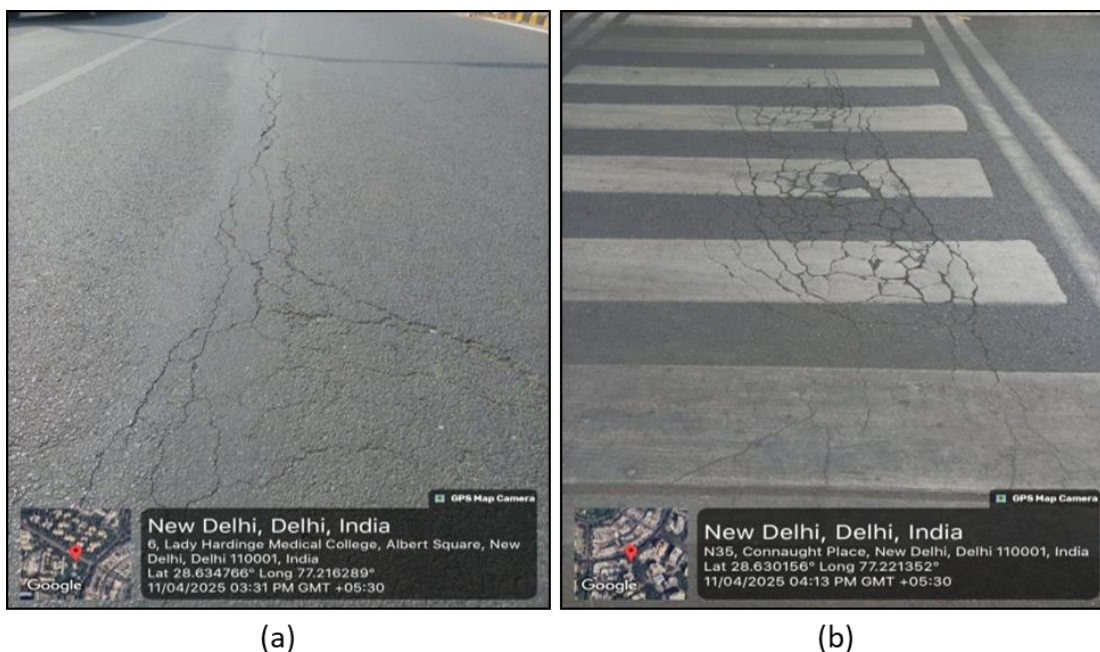


Photo 18: Typical View of Distresses on Two Project Roads

CONSULTANCY PROJECTS

Development of Airfield Pavement Management System for Ten Airports of India

Funding Agency: Airport Authority of India

Duration of the project: 2020 to 2025

Broad Objectives: To develop a data-driven Airfield Pavement Management System (APMS) for scientific pavement management, to assess pavement condition using advanced survey techniques, to evaluate the Pavement Condition Index (PCI) as per ASTM/ICAO guidelines, to recommend appropriate maintenance strategies for runways, taxiways, and aprons, and to improve the overall safety, performance, and lifecycle of airfield pavements.

The project focused on developing a data-driven Airfield Pavement Management System (APMS) for scientific assessment and maintenance planning of airfield pavements. It covered ten airports in India (Figure 5a) Chennai, Kolkata, Rajahmundry, Khajuraho, Surat, Vadodara, Gaya, Gaggal, Imphal, and Agartala using advanced techniques such as Network Survey Vehicle (NSV) surveys, GPS-tagged surface imaging, and three-cycle time-series data collection.

PCI evaluation was carried out using the PAVER software as per ASTM/ICAO guidelines (Figure 5b), and maintenance strategies were developed for runways, taxiways, and aprons. Boeing Bump Index (BBI) and friction data were also analyzed for functional and safety assessment.

The developed APMS (Figure 5c) serves as an effective decision-support tool for optimized maintenance planning and safe operations. It is recommended to extend APMS to all airports in India, supported by centralized databases, periodic automated surveys, and integration of AI/ML-based predictive tools for sustainable airfield pavement management.

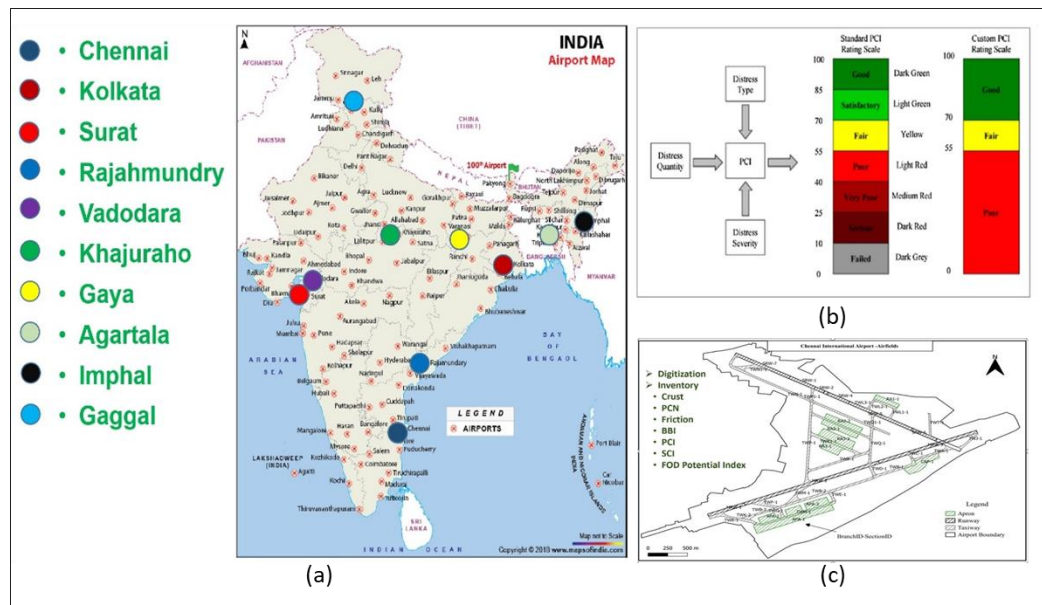


Figure 5 (a) Geographic location of 10 airports (b) Pavement Condition Index (c) APMS

Calibration and Validation of Vehicle Mounted Falling Weight Deflectometer (VMFWD) for Pavement Structural Evaluation

Duration of the project: 2025 to 2026

Broad Objectives: The study was undertaken to carry out calibration and validation of the Vehicle Mounted Falling Weight Deflectometer (VMFWD) to ensure its accuracy and reliability. It also aimed to verify the performance of the load cell and deflection sensors (geophones), evaluate the repeatability and consistency of load and deflection measurements, and validate the VMFWD results through comparison with the reference FWD system of CSIR-CRRI. Further, the study sought to establish the suitability of VMFWD for pavement structural evaluation.

The study comprised calibration of the load cell and deflection sensors, followed by validation through field comparison with a reference Falling Weight Deflectometer system. The testing programme included load measurement verification, sensor calibration (relative and reference), repeatability assessment of load and deflection measurements, and evaluation of deflection bowl behaviour. Test setup for geophones and load cell are shown in Photo 19.

The results indicated that the VMFWD demonstrated stable load application, consistent sensor performance, and repeatable deflection measurements, with good agreement observed with the reference system. The deflection bowl characteristics confirmed proper simulation of pavement response under loading.

The study establishes that the VMFWD is a reliable and effective tool for non-destructive pavement structural evaluation, suitable for applications such as overlay design, remaining life assessment, and network-level pavement management, and is compliant with relevant standards.

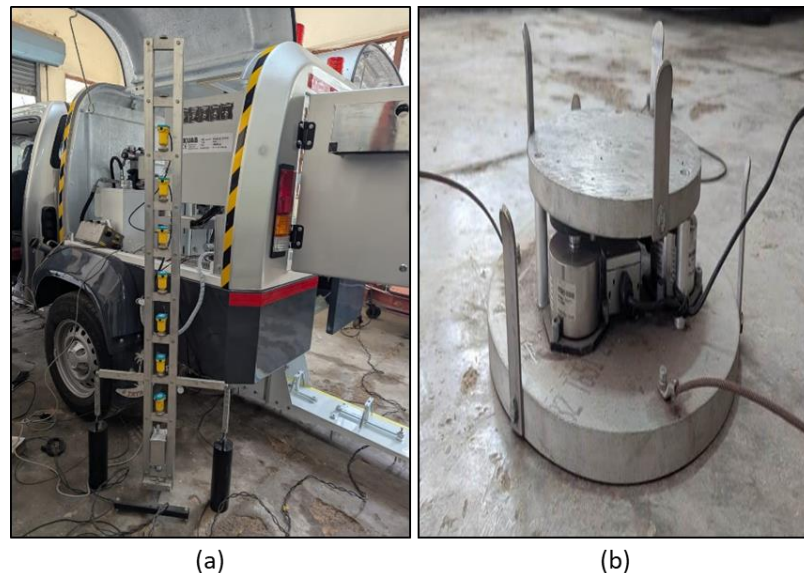


Photo 19 (a) Test setup for geophones (b) Test setup for load cell

Rigid Pavement

RESEARCH PROJECTS

Comprehensive Condition Assessment and Remediation Strategies for Six Lane Partial Access Controlled Eastern Peripheral Expressway (NE 2), Packages I to VI, starting from Kundli (1.00 KM) to Palwal (136.00 KM)

Funding Agency: National Highway Authority of India

Duration of the project: From August 2025 to June 2026

Broad Objectives:

- (i) Detailed site investigation for different types of distresses, including extraction, investigation, and testing of cores, MIT scan investigation, joint detailing, etc., as per requirements.
- (ii) Performance evaluation of repair techniques used for rectification.
- (iii) Review of documents related to design, QC/QA procedures carried out, records showing the number of PQC slab panels reconstructed during execution, methodology, and materials used for repairs.
- (iv) Recommendation of rectification measures for distresses observed in the pavement section.
- (v) Preparation of a comprehensive report detailing the investigation findings, identifying the root causes of pavement defects on concrete pavements, recommending appropriate rectification/removal methodologies, and suggesting improvements for enhancing the current pavement surface conditions of the expressway.

Manager (Technical), National Highway Authority of India, Ghaziabad approached CSIR-Central Road Research Institute (CSIR-CRRI), New Delhi, to take up the work of Comprehensive Condition Assessment and Remediation Strategies for Six Lane Partial Access Controlled Eastern Peripheral Expressway (NE 2), Packages I to VI, starting from Kundli (1.00 KM) to Palwal (136.00 KM). The visual condition survey method was undertaken for the inspection of the rigid pavement constructed and during the visual survey, the following types of distress were visually observed and recorded along the rigid pavement:

- Longitudinal Cracks
- Transverse Cracks
- Diagonal Cracks
- Plastic Shrinkage Crack
- Lane Separation with Fault
- Settlement of concrete panels
- Approach Slab Settlement and Potholes (predominantly at structural locations due to failed surface repairs)
- Corner Breaks
- Surface Scaling and Texture Loss
- Pop-outs

The different types of distresses observed on the pavement is shown in Photo 20-Photo 25.



Photo 20: Longitudinal Crack in L3 at CH 19.800



Photo 21: Transverse Crack in Lanes L1 to L3 at the middle of the panel



Photo 22: Diagonal Crack on full carriageway with spalling over the crack



Photo 23: Lane Separation between Lane L4 and L5, width of 15-20mm



Photo 24: Settlement observed on full carriageway repaired with bituminous carpet



Photo 25: A view of the Surface scaling observed on the concrete pavement



Photo 26: Extracted PQC core samples

Assessing the feasibility of Geo-Composites as a Sustainable Replacement for Conventional GSB in Rigid Pavement Structure

Funding Agency: Tech Fab (India) Industries Limited

Duration of the project: From December 2024 to June 2027

Broad Objectives:

- (a) To investigate the properties of materials (aggregates, geo-composites and soil) for their suitability for road/pavement construction.
- (b) To build model pavements with and without geo-composites and to evaluate its performance under loading.

The relentless pace of infrastructural development has created a significant demand for construction materials all over the world. The use of geocomposites, which combine a geogrid and a geotextile, can be an effective solution as they offer both reinforcement and separation/filtration functionalities. Incorporating geocomposites reduces capping layer thickness by 25% and overall granular cover by 20%. The geocomposite stabilized sections had a superior performance than the unstabilized sections, showing a decrease in superficial rutting and vertical stress at the subgrade. Field performance of geocomposite embedded pavement sections revealed that geocomposites found to be efficient to drain the water rapidly. Past studies demonstrated the benefits of using geocomposites in bituminous pavement applications. However, a little documentation is available on utilization of drainage geo composite in the rigid pavement. Thus, there is a need to study behaviour of rigid pavement separately.



Photo 27: Typical photo of geocomposites

Table 1: Different tests and their results

Test	Unit	Non-woven Geotextile	Geogrid	Geocomposite (Present Study)
Water Permeability (ASTM D4491)	L/m ² /s	45 – 75	—	131 / 91.5
Permittivity (ASTM D4491)	s ⁻¹	1.10	—	1.83
Hydraulic Transmissivity (ASTM D4716)	L/m/s @ 100 kPa	0.165	0.215	0.300
	L/m/s @ 200 kPa	0.095	0.120	0.178
Apparent Opening Size (AOS) (ASTM D4751)	µm	125	—	112
Tensile Strength (MD) (ISO 10319)	kN/m	15.2	20 – 40	28.8
Tensile Strength (CMD) (ISO 10319)	kN/m	8.5	16	12.9
CBR Puncture Strength (ASTM D6241)	N	2000 – 2500	—	3151

Assessing the suitability of RAP (Reclaimed Asphalt Pavement) as coarse aggregate with Nanomaterial as a construction material in concrete road construction

Funding Agency: CSIR

Duration of the project: From April 2024 to March 2026

Broad Objectives:

- (i) To assess the feasibility of RAP as coarse aggregates with carbon nanotubes (CNTs) in concrete road construction and to predict the optimum usage.
- (ii) To investigate and compare the influence of RAP as coarse aggregates with carbon nanotubes (CNTs) on concrete's fresh and hardened properties with conventional concrete.

This investigation deals with the use of reclaimed asphalt pavement (RAP) aggregates in cement concrete, particularly for the construction of road pavements. Concrete mixtures consume large amounts of natural aggregates, accounting for more than 70% of their total volume. In recent years, the demand for quality natural aggregates has increased rapidly, which led to the consideration of using RAP aggregates in structural concrete as well as road applications. Therefore, there exists a need to look into alternatives that will provide suitable aggregate for concrete construction. Also, modern concrete pavement requires structural components with higher mechanical strength and greater durability. A solution is the addition of nanomaterials to cement-based materials, which can enhance their mechanical properties. Such nanomaterials include carbon nanotubes (CNTs). Optimal dosages of this material can improve the compressive, tensile and flexural strength of cement-based materials and their water absorption and workability. The use of this nanomaterial can enhance the performance and life cycle of concrete pavements. Adding CNTs to bitumen increases its strength and elastic properties. When combined with cement, the addition of carbon nanotubes contributes to changing the microstructure of cement composites, which enhances their mechanical and functional properties. As the CNTs have good interlocking properties with both cement and bitumen, thus the utilization of this material along with RAP will improve the properties of concrete.



Photo 28: Ingredients of Concrete used and prepared Specimens

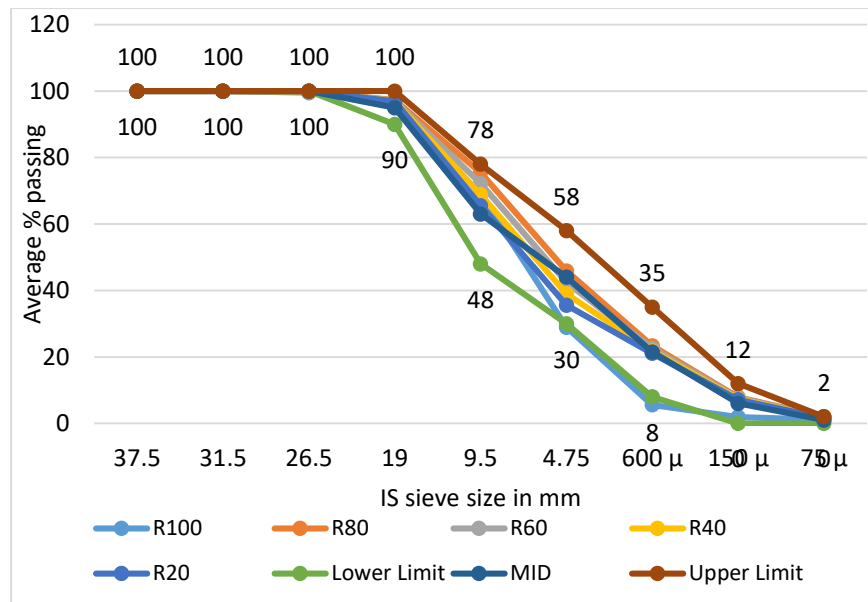


Figure 6: Gradation of RAP varying from 100% to 20 %

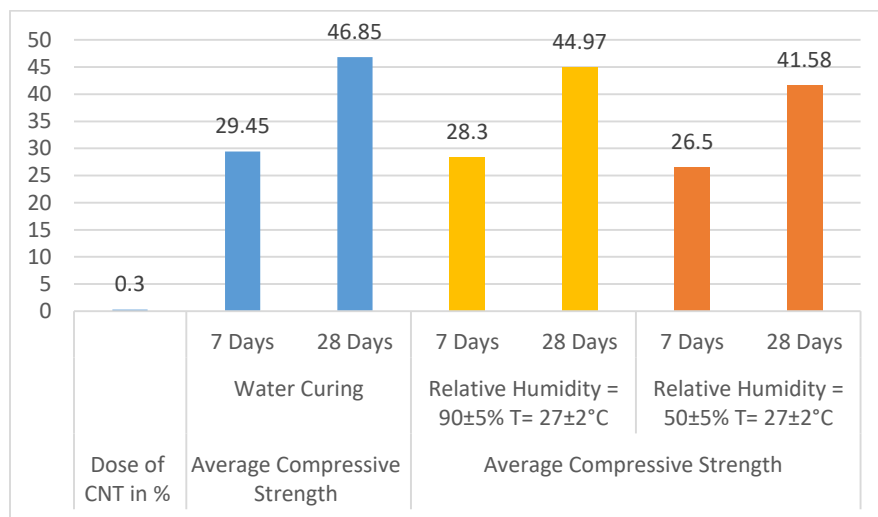


Figure 7: Test results using of CNT in concrete

Assessing the suitability of processed recycled concrete aggregate (PRCA) based geopolymer concrete as construction material for road construction

Funding Agency: CSIR-CRRI

Duration of the project: From April 2025 to March 2027

Objectives:

- Development of processing methodology for removal of adhered mortar from RCA.
- The mechanical, durability and micro-structural properties of Geopolymer Concrete with varying percentage of processed RCA will be evaluated.

Recycling of concrete has emerged as a critical strategy in sustainable construction due to the depletion of natural aggregates and the rapid increase in construction and demolition (C&D) waste. Initial applications were largely confined to low-grade works such as road sub-base but later studies demonstrated its feasibility in structural concrete with up to 20–30% replacement yielding comparable performance, and over time RCA has evolved into a viable component for sustainable and structural

applications including GPC, although adhered mortar (AM), defined as the residual cement–sand paste attached to original aggregates after crushing, remains the primary limiting factor as it increases porosity and water absorption, reduces density, strength, and stiffness, and leads to the formation of weaker interfacial transition zones (both old and new ITZ), with typical AM content ranging from 20% to 60% depending on the parent concrete; meanwhile, geopolymer concrete, based on alkali-activated aluminosilicate binders such as fly ash and GGBS, offers a low-carbon alternative to OPC systems and has recently attracted attention for incorporating RCA due to its improved resistance to chemical attack, lower chloride permeability, and enhanced ITZ characteristics, enabling higher replacement levels of RCA (up to 50–100%) with appropriate mix design, and in this context, adhered mortar removal techniques have shown promising improvements, with certain processes achieving 70–85% AM removal as evidenced by the transformation of original RCA to processed RCA (PRCA).



(a)



(b)

Photo 29: (a) Pictorial View of RCA; and (b) Pictorial View of processed RCA

Experimental data shows the specific gravity increases from 2.31 to 2.65 and water absorption decreases significantly from 5.35% to 0.65%, thereby enhancing aggregate quality; however, despite the availability of multiple AM removal methods, no universally accepted, cost-effective, and scalable solution has yet been established, highlighting the need for future research focused on hybrid techniques, industrial scalability, and standardization, and accordingly, the present study aims to develop an effective AM removal methodology for RCA and to evaluate the mechanical, durability, and microstructural performance of geopolymer concrete prepared using both natural aggregate and processed recycled concrete aggregate (PRCA).

CONSULTANCY PROJECTS

Technical /Quality Audit of Rigid Pavement in package 2 of UER-II (NH-344M & NH-344N) and package 2 of Dwarka Expressway (NH-248BB)

Funding Agency: National Highway Authority of India

Duration of the project: From October 2024 to September 2025

Broad Objectives: Technical /Quality audit of Rigid pavement in Package 2 of UER-II and Package 2 of Dwarka Expressway

Manager (Technical), National Highway Authority of India approached CSIR-Central Road Research Institute (CSIR-CRRI), New Delhi, to take up the work of Technical/Quality audit of in package 2 of UER-II (NH-344M & NH-344N) and package 2 of Dwarka Expressway (NH-248BB). The Dwarka Expressway Package 2 located near sector 21 Dwarka to Delhi Haryana Border (Km 8.700 to Km 9.500) and the Urban Extension Road –II (UER-II)-NH 344 M, Package 2 (From Karala Kanjhawala Road) (Km 22.500 to Km 23.00) in the state of Delhi in the state of Delhi which has been constructed through an Engineering, Procurement, and Construction (EPC)Contract.

The visual condition survey method was undertaken for the inspection of the rigid pavement constructed at toll plaza and during the visual survey, different types of distresses were visually observed and recorded along the rigid pavement. Based on the detail field and laboratory investigation carried out by CRRI team, the client has been recommended for the corrective measures of repair and rehabilitation of the concrete pavement.



Photo 30: A view of the Dwarka Expressway Toll Plaza (KM 8.700 to 9.500 KM)



Photo 31: A view of the UER-II Toll Plaza (KM 22+500 to 23+000 KM)

Vetting of Rigid Pavement Design for Upgradation of Roads of Phase I at Industrial Area Masoorie Gulawathi road District Hapur, UP

Funding Agency: RCC Developers Pvt. Ltd.

Project Duration: November 2025 to April 2026

Objective: To vet the Rigid Pavement Design Provided by the client as per IRC: SP-140 2024

The present carriageway of the project is two lanes, and the type of existing pavement is flexible. The Existing Road of Phase-1 is Single and Double Lane with widths 5.0, 5.5 and 7.5. The existing Road of

phase-1 is moderately to severely damaged. The total Project Length is approximately 13.920 km. The vetting of the Rigid pavement design has been done based on the traffic loading (in terms of axle loading and traffic volume) and subgrade soil CBR provided by the client to the CSIR-CRRI. The design of rigid pavement was vetted as per the IRC: SP 140:2024 and the design summary of the project road after verification is as follows:

Table 2: Design summary of the project

S. No.	Item	Design proposed by CSIR-CRRI
1.	Rigid Pavement structure	Pavement Quality Concrete (PQCM 40) = 200 mm
2.		PVC sheet between DLC & PQC = 150 micron
3.		Dry lean concrete (DLC)(M10) = 100 mm
4.		Existing GSB = 220 mm
5.		Existing Subgrade = 500mm
6.	Dowel bars in construction joints	Diameter = 25mm, Length = 360mm Spacing = 250 mm
8.	Deformed Tie bar	Diameter=12mm, Length=640mm Spacing = 830 mm

Expert advice on Repair and strengthening of concrete roads in township area, office building area and Hydro power project site area at NTPC Koldam, Bilaspur, H.P

Funding Agency: NTPC Koldam, HP

Duration of the project: From April 2024 to March 2025

Broad Objectives: The objective of the study was to provide expert advice for the repair and strengthening of concrete roads in the township area, office building area, and hydropower project site area of NTPC Koldam

Deputy General Manager (FES), NTPC, Koldam approached CSIR-Central Road Research Institute (CSIR-CRRI), New Delhi to take up the work for providing expert advice for repair and strengthening of concrete road at NTPC Koldam township area, administration building area and Hydro Power plant area and to suggest suitable recommendations for repair and strengthening of the existing distressed concrete roads. it was stated that the RCC road was constructed in year 2005 -2007 and has deteriorated in the township area and power plant area. In order to tackle the problem of distressed concrete road and for the safe and comfortable ride of the users, a need was felt to investigate the cause of damage in detail and suggest suitable remedial measures

Based on the field investigations carried out i.e Visual inspection of the existing distressed concrete pavement test pit for determining the crust thickness of the existing pavement, Traffic data and Concrete core, a suitable concrete overlay recommendations for the strengthening of the township area, office building area and Hydro power project site area at NTPC Koldam, Bilaspur was suggested to the client.



Photo 32: Severely deteriorated spalled transverse joint



Photo 33: A typical ravelled surface repaired with cement mortar

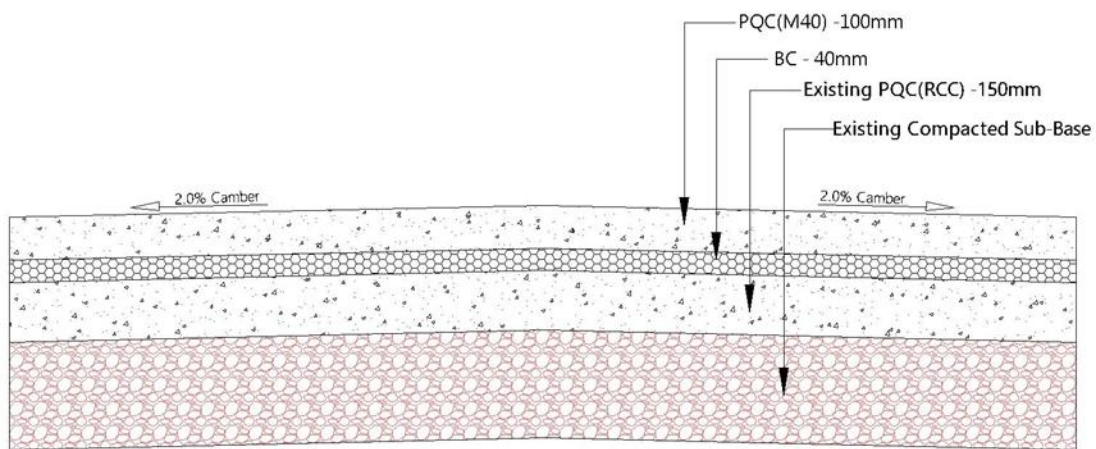


Photo 34: Cross-Section of concrete Overlay

Transportation Planning and Environment

RESEARCH PROJECTS

Comprehensive Traffic Study on Identified Junctions in Ahmedabad

Funding Agency: Ahmedabad Municipal Corporation

The project titled “*Comprehensive Traffic Study on Identified Junctions in the City of Ahmedabad*”, sponsored by the Ahmedabad Municipal Corporation, is being undertaken over a duration of 11 months. The primary objective of the study is to conduct detailed traffic surveys at selected junctions across Ahmedabad city and to analyze traffic flow characteristics along with congestion patterns. The study also aims to develop comprehensive reports and provide actionable recommendations based on the collected data. The methodology involves conducting traffic surveys through vehicle counting, classification, and observation during peak hours using video recording techniques. The collected data is processed to develop traffic flow diagrams and to estimate key performance indicators such as delays, queue lengths, and saturation levels. Further, spatial and temporal analyses are carried out to identify congestion hotspots, assess route efficiency, and support informed decision-making for traffic management and infrastructure planning in the city.

In Ahmedabad, traffic surveys involve vehicle counting, vehicle classification, and observation during peak hours to analyze flow patterns, congestion, and pedestrian activity, by video recording; the collected data (Photo 35) is then processed to generate traffic flow diagrams, measure delays, queue lengths, and saturation levels, and further analyzed spatially and temporally to identify congestion hotspots, evaluate route efficiency, and inform traffic management and infrastructure planning strategies.

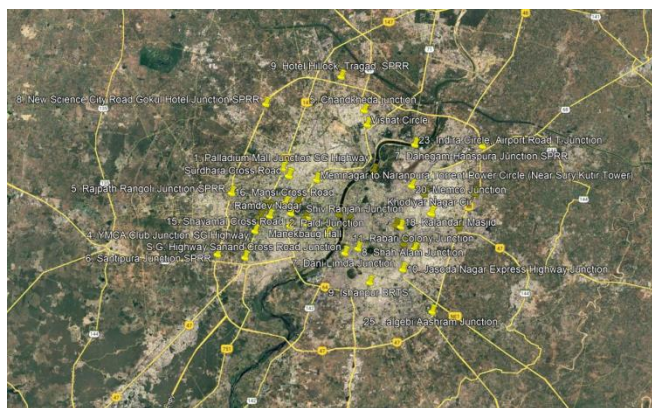


Photo 35: Turning Movement Traffic Survey Locations at 25 junctions in Ahmedabad

Comprehensive Mobility Plan Udaipur

Funding Agency: Udaipur Development Authority

The project, sponsored by the Udaipur Development Authority and undertaken over a duration of 11 months, focuses on developing a comprehensive transportation planning framework for Udaipur city. The key objectives include understanding the existing transport network, traffic characteristics, travel patterns, and overall transport system to identify prevailing issues and future potentials, as well as developing a travel demand model using the four-step transport modelling approach. The study further aims to estimate

future travel demand for the horizon year 2045 based on projections of population, employment, and external traffic, followed by the development and evaluation of multiple planning scenarios. Ultimately, the project seeks to formulate a comprehensive transportation plan by integrating land use and transport systems to support sustainable urban growth.

The study presents a detailed assessment of transportation and traffic management in Udaipur, beginning with an evaluation of the existing road network and traffic characteristics through surveys conducted at mid-blocks, intersections, and outer cordon locations. It includes analyses of traffic volume, speed and delay, growth trends, and passenger travel behaviour using household and cordon surveys. Road safety conditions are examined through accident data analysis and safety audits, with appropriate remedial measures proposed. Additionally, the study evaluates intermediate public transport operations, pedestrian facilities, parking demand–supply conditions, and freight movement patterns. Based on these inputs, a calibrated travel demand model for both private and public transport is developed and applied for the horizon year 2045 under different scenarios. The study further proposes and evaluates corridor-level improvement measures such as signal optimization, geometric design enhancements, road widening, and improvements in public transport, freight movement, and non-motorized transport using microsimulation tools. It concludes with key findings and strategic recommendations aimed at enhancing mobility, safety, and long-term sustainability of Udaipur’s transport system.

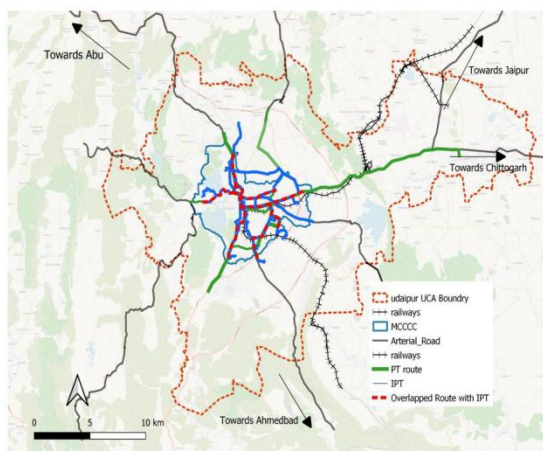


Photo 36: PT-IPT Overlapped Network Map proposed for Udaipur

Comprehensive Mobility Plan Bikaner

Funding Agency: Bikaner Development Authority

The project, sponsored by the Bikaner Development Authority and planned over a duration of 11 months, aims to develop a comprehensive transportation plan for Bikaner city. The primary objectives of the study are to understand the existing transport network, traffic characteristics, travel patterns, and overall transport systems in order to identify key issues and future potentials, and to develop a travel demand model using the four-step transport modelling process. The study further focuses on estimating future travel demand for the horizon year 2045 based on projections of population, employment, and external traffic, followed by the development and evaluation of multiple planning scenarios. Ultimately, the project seeks to prepare an integrated transportation plan by evolving a balanced land-use and transport framework to support sustainable urban growth.

The study outlines a phased approach to transportation improvements. In the short term, it proposes junction improvement plans for selected major intersections, corridor improvement strategies for key corridors, and implementation of road safety features along with at-grade improvements. In the medium term, the focus is on developing bus and intermediate public transport (IPT) routes and proposing elevated corridors at high-density traffic intersections. For the long term, the study includes traffic demand assessment for both the base year and the horizon year 2045, development of network-level recommendations using macro-simulation techniques, and evaluation of these recommendations through micro-simulation tools. These measures collectively aim to enhance mobility, improve safety, and ensure efficient and sustainable transport planning for Bikaner.

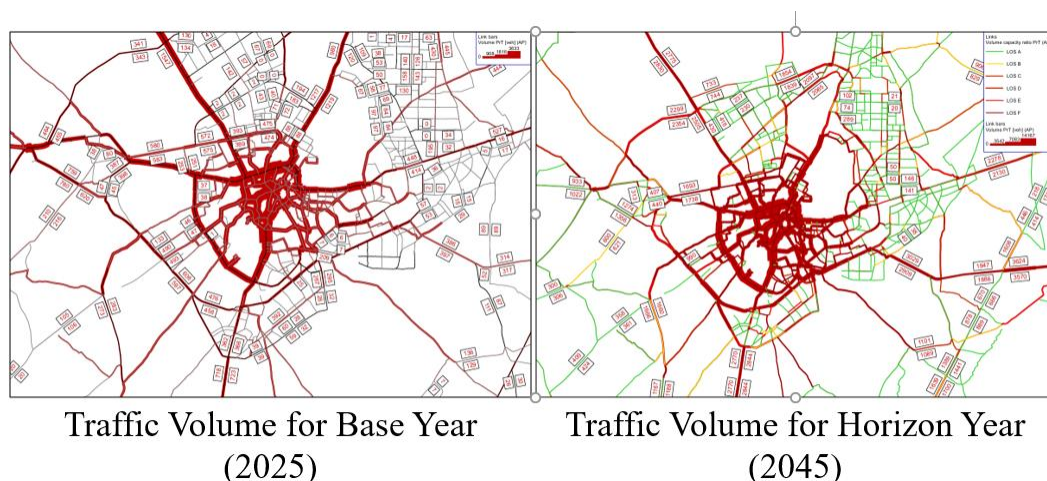


Photo 37: Travel Demand Model for Bikaner for base and Horizon years

Comprehensive Mobility Plan Kota (CMP - Kota)

Funding Agency: Kota Development Authority

The project, sponsored by the Kota Development Authority and undertaken over a duration of 11 months, focuses on preparing a comprehensive transportation plan for Kota city. The key objectives include understanding the existing transport network, traffic characteristics, travel patterns, and overall transport systems to identify prevailing issues and future potentials, and developing a travel demand model using the four-step transport modelling process. The study also aims to estimate future travel demand for the horizon year 2045 based on projections of population, employment, and external traffic, followed by the development and evaluation of various planning scenarios. Ultimately, the project seeks to formulate an integrated transportation plan by establishing a balanced land-use and transport framework to support sustainable urban growth.

The study highlights that Kota's road network comprises a mix of narrow historic streets and wider arterial roads, but faces challenges such as encroachments, heterogeneous traffic, and peak-hour congestion dominated by two-wheelers and cars. Public transport services are limited, with intermediate public transport operating informally and lacking integration. Household surveys indicate that work and education are the primary trip purposes, alongside increasing private vehicle ownership and low public transport usage. While walking remains significant, pedestrian infrastructure is inadequate, and cycling facilities are nearly absent. Parking demand exceeds supply, leading to widespread on-street parking that

reduces effective road capacity. Freight movement, particularly of marble and grain, interacts with passenger traffic, creating operational conflicts. Road safety analysis reveals a rising trend in accidents, especially among pedestrians and two-wheeler users, with several identified blackspots and design deficiencies. To address these issues, the plan proposes a multimodal strategy including expansion of city bus systems with IPT integration, geometric improvements at junctions, development of multimodal hubs, provision of continuous footpaths and dedicated cycle tracks, implementation of parking management strategies, organized freight routing and terminals, deployment of intelligent transport systems, promotion of electric vehicle infrastructure, and targeted road safety interventions such as blackspot improvements, traffic calming, and safer school zones. These people-centric measures aim to enhance mobility, safety, and sustainability while supporting the city's economic growth and tourism.



Photo 38: a) Speed delay route surveyed b) Freight Survey c) Gig worker surveys in Kota

Comprehensive Mobility Plan for Ajmer City

Funding Agency: Ajmer Development Authority (ADA), Ajmer, Rajasthan

The objectives of the study have been conceived majorly in two phases as given below:

- The main objectives of **Phase I** are:
 - ❖ Studying Existing Traffic (Vehicle and Passenger), Pedestrian and Parking Demand
 - ❖ To work out a traffic/ transport system management (TSM) plans to ease the existing traffic problems in Ajmer focusing on short term remedial measures considering junctions improvement, area traffic management schemes, parking plans, NMT infrastructure etc.
 - ❖ Prepare City Logistics Plan (CLP)
- The main objectives of **Phase II** are:
 - ❖ To develop transport demand model for the city of Ajmer
 - ❖ To develop a transport systems plan focusing on long term measures considering Network Augmentation, and Designing appropriate Public Transport Systems etc. for horizon years

Ajmer City has witnessed a drastic change in terms of its urban profile and demographic transition in the past few years. The mobility needs have also increased drastically and related traffic related problems namely traffic congestion, on-street parking etc. are also multiplying. Further, the number of road crashes and associated fatalities also increasing on the roads of Ajmer city. Accordingly, Ajmer Development Authority (ADA), Ajmer has made request to CSIR-Central Road Research Institute (CRRI), New Delhi to study the traffic problems to propose a comprehensive traffic plan for the city of Ajmer. The CSIR-CRRI has taken up this present study through ADA, Ajmer in the month of July, 2025 to develop Comprehensive Mobility Plan for Ajmer that considered ADA Region covering Kishangarh and Pushkar

cities as well. For this, conduct of traffic surveys has been done in an extensive and exhaustive manner along with collection of secondary data from various secondary sources. Some of the typical view of intersections in Ajmer is shown Photo 39.



Photo 39: Description of Traffic Movements at various locations of Ajmer City

Based on the Primary surveys data and secondary survey data findings, the various measures have been critically studied and examined. Accordingly, most suitable recommendations have been proposed for the city of Ajmer. The list is given as below:

Comprehensive Traffic and Transportation Studies for the cities of Nainital and Haldwani

Funding Agency: Uttarakhand Public Works Department (UKPWD), Nainital, Uttarakhand

Duration of the project: From Feb 2026 to Oct 2026

Broad Objectives:

The objectives of the study have been conceived as given below:

- ❖ Studying Existing Traffic (Vehicle and Passenger), Pedestrian and Parking Demand of Nainital and Haldwani cities
- ❖ To work out a traffic/ transport system management (TSM) plans to ease the existing traffic problems in Nainital and Haldwani cities
- ❖ To develop a transport system plan along focusing on long term measures considering Network Augmentation in terms of ring/ bypass roads (if feasible), design of Public Transport Systems etc. for horizon years

As per the directions of the Hon'ble High Court of Uttarakhand, the Regional Office of Public Works Department (PWD), Nainital, Government of Uttarakhand has made request to CSIR-Central Road Research Institute (CRRI), New Delhi to study the traffic problems to propose a comprehensive traffic plan for the city of Nainital and surrounding areas including Haldwani. The main aim is to understand impact of commercial traffic along with huge tourist traffic demand on the infrastructure of Nainital that creating unregulated flow of vehicles and the traffic jams. Typical view of some intersections to be studied is shown in Photo 40. The geometric designs of these intersections would be carried out and accordingly signal designs would be provided if needed based on the traffic data. Other facilities like planning and locations of Foot over Bridge/ grade separated structures will be given as outcome of the study, however structural design has to be done as a separate study. Further, the technical input and support in development of software/ App for parking management in Nainital also would be provided by CRRI to PWD during implementation. The areas surrounding Nainital like Jim Corbett Museum Junction

(Kaladungi), Kaichi Dham Road will also be considered to study the traffic impact on Nainital road network.



Photo 40: Description of Traffic Movements at various locations of Nainital and Haldwani Cities

Driver Behaviour analysis at urban intersections under traffic blinker/flashing signal

Broad Objectives:

- To analyse driver behaviour, compliance, and conflict patterns at urban intersections operating under flashing signal mode.
- To identify key risk indicators (speed variance, gap acceptance, hesitation, sudden stops, violations) that contributes to driver behaviour during flashing signal.

To analyze driver behavior, compliance, and conflict patterns at urban intersections operating under flashing signal mode, the methods involve deploying video-based observational studies, vehicle trajectory tracking, and conflict analysis techniques. Data collection includes recording vehicle speeds, gap acceptance, hesitation, sudden stops, and violations through manual surveys and automated sensors, complemented by detailed analysis of conflict points, such as near-misses or impact-prone movements.

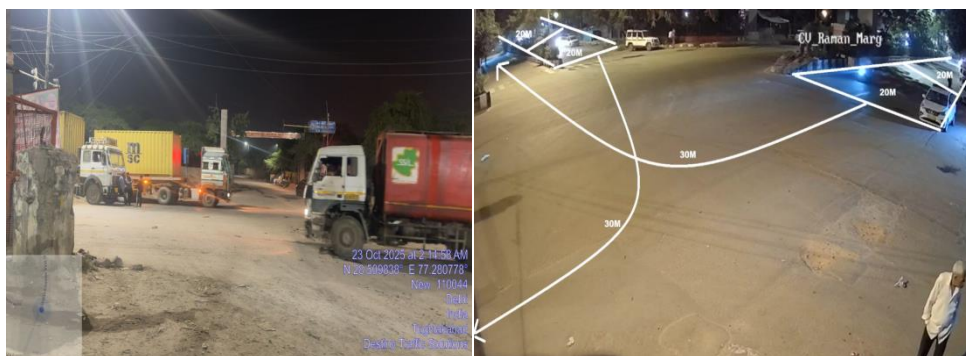
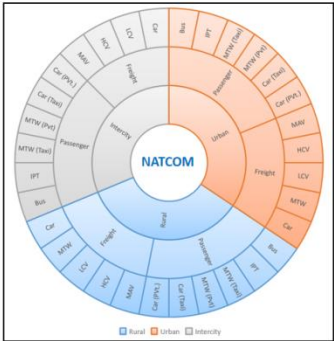


Photo 41: Glimpses of data collection through Video recording at Survey sites

National Green House Gases Inventory from Road Transport Sector

This project, sponsored by the Ministry of Environment, Forest and Climate Change (MoEFCC) in collaboration with CSIR–Indian Institute of Petroleum (CSIR-IIP), is being carried out from April 2024 to March 2027. The primary objective is to estimate Vehicle Kilometres Travelled (VKT) across India for various vehicle categories such as cars, two-wheelers, buses, and freight vehicles. Based on VKT as the key activity parameter, the study further aims to estimate fuel consumption by fuel type and quantify vehicular emissions including CO₂, NO_x, and particulate matter using appropriate emission factors.

The study addresses the rapidly increasing contribution of the road transport sector to greenhouse gas emissions in India, driven by urbanisation, rising motorisation, and expanding passenger and freight movement. Accurate estimation of these emissions is crucial for national climate reporting, policy formulation, and long-term mitigation planning, particularly under international commitments such as the UNFCCC. This work contributes to India’s National Communication by developing a comprehensive and data-driven framework for estimating road transport emissions at the national level. For urban passenger transport, the study adopts detailed trip-based methodologies. Key parameters such as per capita trip rates (PCTR) and trip lengths are derived from multiple large-scale datasets, including the Manual for Trip Generation Rates for Indian Cities (2023) covering 27 cities, and CSIR cohort studies conducted in 2024 across 22 cities. These datasets collectively represent extensive empirical evidence from thousands of households and individuals, ensuring robustness in VKT estimation

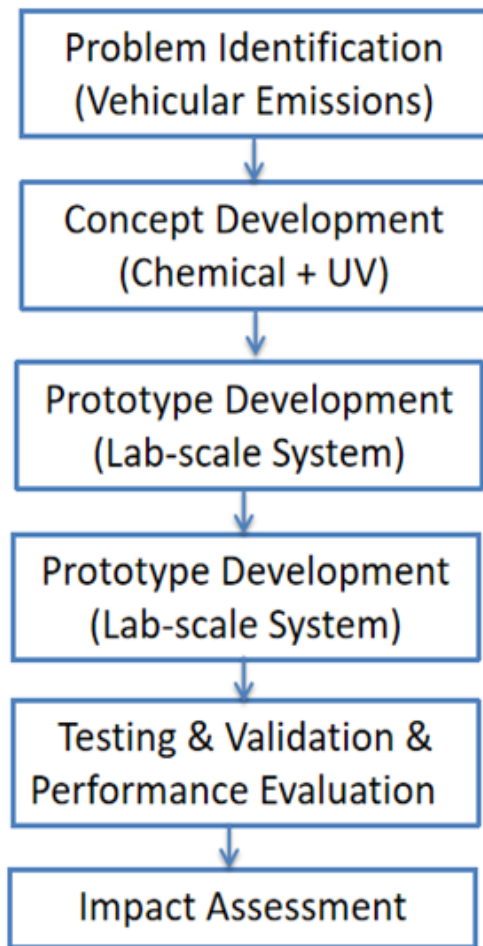


The methodology integrates both primary and secondary data sources. Primary data include household travel surveys and cohort studies capturing trip frequency, purpose, and length. Secondary data sources include vehicle registration data from VAHAN, population statistics from Census data extrapolated to 2024, and operator-reported average VKT for different vehicle categories. By combining user-level travel behaviour data with operator-level vehicle usage patterns, the study generates city-level and vehicle-specific VKT estimates, which are further aggregated to regional and national scales.

A key finding is the significant heterogeneity among Indian cities. Even cities with similar population sizes show considerable variation in VKT shares due to differences in infrastructure, public transport availability, IPT systems, non-motorised transport facilities, and urban form. The study therefore adopts a city-specific approach rather than uniform assumptions, ensuring more accurate and context-sensitive emission estimates.

Study on Controlling Harmful Auto-Emissions & Neutralising Noxious Inhalants (CHANNI)

The project titled “Study on Controlling Harmful Auto-Emissions & Neutralising *Noxious Inhalants* (CHANNI)”, funded by CSIR, is a 24-month research initiative (April 2025–April 2027) aimed at developing a cost-effective technology to significantly reduce vehicular tailpipe emissions and improve air quality, particularly in high-traffic urban areas. The study also focuses on assessing the effectiveness of this technology in minimizing human exposure to harmful pollutants and enhancing public health outcomes. The research involves the design and development of a lab-scale prototype incorporating



innovative approaches such as chemical coating and UV-assisted processes to enable absorption and neutralization

The anticipated environmental and societal benefits are substantial. The technology is expected to significantly reduce pollutants such as NO_x, PM_{2.5}, CO, and hydrocarbons, leading to improved air quality. This reduction will directly contribute to lowering the incidence of respiratory and cardiovascular diseases, including asthma, lung infections, and heart-related conditions. Improved air quality is also expected to reduce hospitalizations, decrease healthcare costs, and enhance life expectancy and overall well-being, particularly for vulnerable populations such as children and the elderly.

In addition to health benefits, the project offers technological and economic advantages. Improved combustion and exhaust treatment processes may enhance fuel efficiency, while reduced engine wear can extend vehicle lifespan and increase resale value.

In addition to health benefits, the project offers technological and economic advantages. Improved combustion and exhaust treatment processes may enhance fuel efficiency, while reduced engine wear can extend vehicle lifespan and increase resale value.

Assessing the spatial disparity between transport social needs and public transport provision

The project titled “*Assessing the Spatial Disparity between Transport Social Needs and Public Transport Provision*”, with a duration from 30 May 2024 to 30 May 2026, aims to evaluate the mismatch between transport needs and service provision in selected cities. The primary objectives of the study are to develop and assess an index for transport social needs in two cities, to evaluate the level of public transport provision through a dedicated index, and to analyze the disparity between transport needs and available services within each city. As part of the study, data collection for Indore has been initiated and completed, while data collection for the second city is yet to commence. The collected data is currently being analyzed to derive meaningful insights into spatial inequities and to support evidence-based planning for more inclusive and equitable urban transport systems.

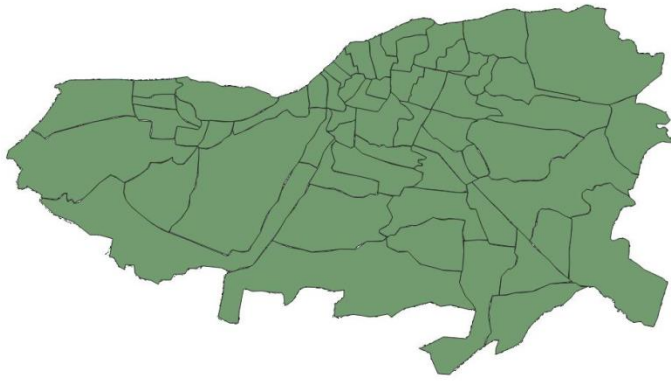


Photo 42: Indore slum area digitization

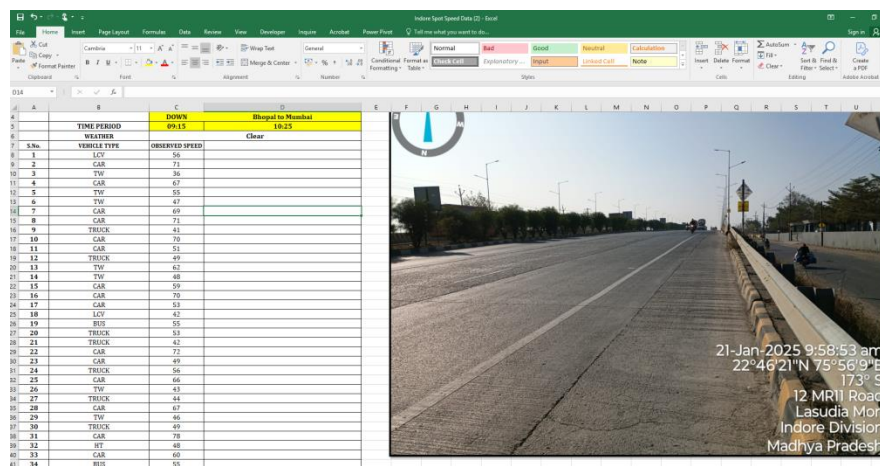


Photo 43: Indore Spot speed

Virtual Reality Based Assessment of Road Signs on Driving Behaviour

Duration of the Project: 2025–2028

Summary of the Work:

The project, scheduled from 31 August 2025 to 28 February 2028, focuses on the development of driver information load for Indian highway and urban conditions, particularly in relation to existing signboards and those specified under IRC guidelines. The study aims to establish a framework that evaluates the cognitive load imposed on drivers while interpreting traffic signage, ensuring that sign systems are effective, comprehensible, and aligned with Indian driving conditions. The model is based on key assumptions, including that the driver is unfamiliar with the site and actively engaged in navigation tasks, requiring clear and relevant sign information for decision-making. The design driver is considered to be either older or inexperienced, representing user groups more likely to face challenges in perceiving and processing information efficiently. It is further assumed that the driver is not impaired by alcohol, drugs, or fatigue, and is literate in English. These assumptions help in developing a robust and inclusive model for signage design. As part of the project progress, procurement (indent) for a virtual reality setup is

currently underway, which will support simulation-based testing and validation of driver response to different signage scenarios



Photo 44: Haphazard

placement of Signs

Development of Innovative Materials for Emission Absorbing Pavement System

- **Development** of Photocatalytic pollution absorbing material for flexible pavement using bitumen emulsion
- **Detailed Surface Chemistry and Characterization** of the Modified bitumen emulsion: synthesis of photocatalytic nanoparticles, surface engineering with emulsifier, mixing of surface engineered photocatalytic nanocomposite emulsifier with bitumen
- **Acquire** a new knowledge of the underlying phenomena of bitumen at nanolevel
- **Measure** Photocatalytic efficiency of pollution absorbing material to develop a new concept of photocatalytic flexible pavement for absorption of vehicular emitted pollution

Develop a multifunctional material with both self-cleaning and pollution absorbing capabilities

The project, categorized under *Fundamental and Innovative Research in Science of Tomorrow* and funded by the Council of Scientific and Industrial Research (CSIR) (FIR040305), is being carried out from 23 July 2024 to 31 March 2026. The primary objective of the study is to develop a photocatalytic, pollution-absorbing material for flexible pavements using bitumen emulsion. The research involves detailed surface chemistry and characterization of modified bitumen emulsions, including the synthesis of photocatalytic nanoparticles, their surface engineering using emulsifiers, and subsequent integration into bitumen to form a nanocomposite. The project also aims to generate new insights into the behavior of bitumen at the nanoscale and to evaluate the photocatalytic efficiency of the developed material for mitigating vehicular emissions. Additionally, the study focuses on developing a multifunctional pavement material with both self-cleaning and pollution-absorbing properties. The findings indicate that the developed photocatalytic material demonstrates significantly enhanced degradation efficiency compared to previously reported systems, achieving approximately 40% reduction in NO₂ levels—an outcome that, to the best of current knowledge, has not been documented in existing literature—thereby highlighting its potential for innovative and sustainable pavement applications

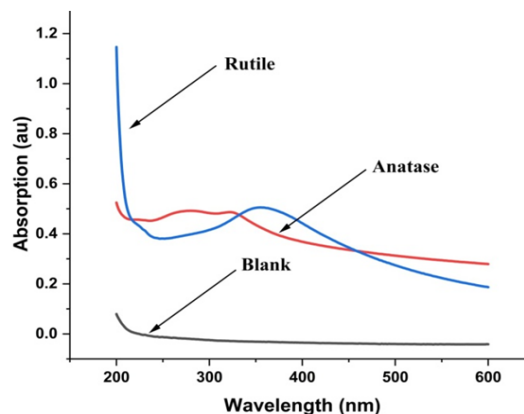
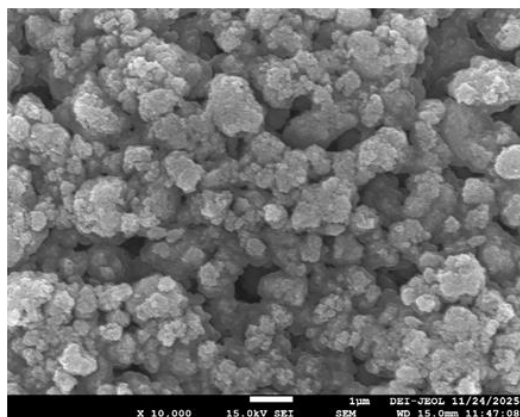


Photo 45: Degradation efficiency of proposed photocatalytic Nanoparticles

Integrated Transport Network Plan (Meghalaya) (ITNDP)

The project, funded by the Meghalaya Infrastructure Development Finance Corporation (MIDFC) under the Meghalaya State Pollution Control Board (GSPCB), was undertaken from October 2020 to May 2025 with the objective of developing an Integrated Transport Network Development Plan (ITNDP) for the entire state of Meghalaya. The study aims to identify and plan a comprehensive transport network aligned with the state's development vision, catering to key sectors such as tourism, agriculture, industry, and mining, while ensuring connectivity to all habitations. The ITNDP Phase 3, prepared by CSIR–Central Road Research Institute, establishes a strategic framework to achieve 100% first- and last-mile connectivity across the state. Out of 6,241 villages, 4,528 are currently connected, leaving 1,713 unconnected. Building upon Phases 1 and 2, Phase 3 proposes the development of 1,058 new roads covering 3,735.3 km, along with 802 bridges and culverts, particularly targeting remote and underserved regions. The plan emphasizes expansion and upgradation of road infrastructure, adoption of climate-resilient and environmentally sustainable design practices, and integration of multimodal transport systems including roads, railways, and ropeways, with specific proposals such as ropeway projects in West Jaintia Hills to improve accessibility in difficult terrain. The total estimated investment for Phase 3 is ₹13,669.94 crore over a 20-year period, including ₹8,430.66 crore for roads, ₹2,960.95 crore for bridges and culverts, and ₹2,278.32 crore for maintenance, translating to approximately ₹684 crore annually, with Photo 46 Integrated Transport network Development Plan with Phase 1, Phase 2 and Phase 3 roads and Village and Habitation location, funding envisaged from state, central, and institutional sources. The plan also incorporates community engagement to align infrastructure development with local needs, along with recommendations for capacity building and institutional strengthening based on best practices from other states. Consolidating earlier phases—Phase 1 (3,541.26 km, ₹14,808 crore) and Phase 2 (7,671.08 km, ₹7,752.84 crore)—the report presents a prioritized, integrated roadmap for achieving universal rural connectivity. With effective implementation, ITNDP Phase 3 has the potential to significantly enhance transport infrastructure, drive economic growth, improve quality of life, and ensure a sustainable and resilient future for Meghalaya.



Review and Vetting of Road Drawings & Design for Haldwani Road Improvement under ADB

- ❖ To conduct a comprehensive technical review of road drawings and designs for the Haldwani Road Improvement Project.
- ❖ To examine the road drawings and designs with reference to IRC standards and recommend suitable improvement measures to enhance traffic flow and road safety.

1. Teen Pani to Nariman Junction along Nainital–Bareilly Road (approx. 10.75 km)

2. Kalusai Temple to Kathghariya Junction along Kaladhungi Road (approx. 5.5 km)

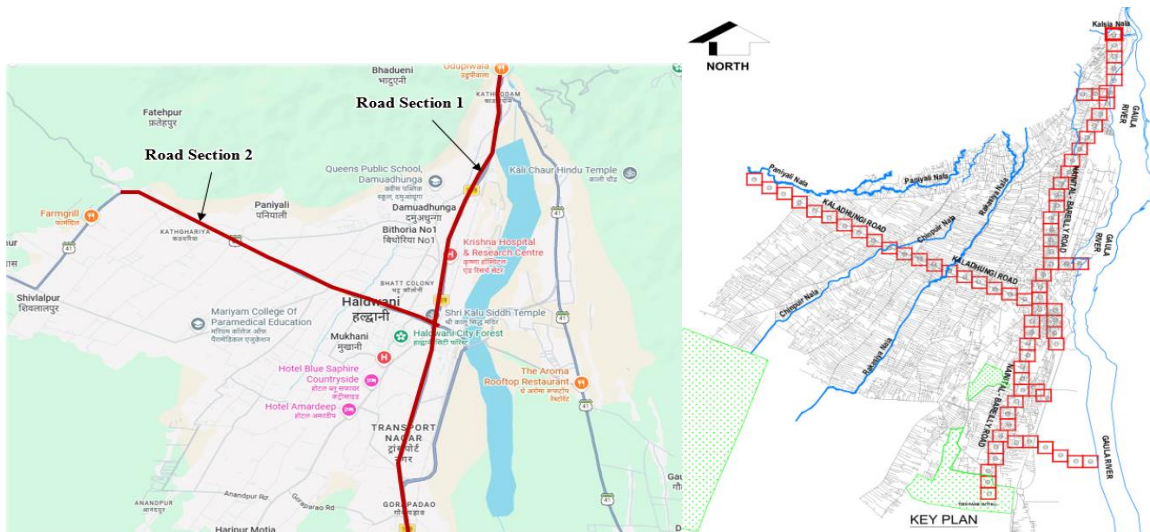


Photo 47. Study Area of Haldwani showing selected Road Sections and Details of Small Sections of the Selected Corridors of Storm Water Drainage for Haldwani

Study on Noise Mapping in the state of Goa

Funding Agency: Goa State Pollution Control Board (GSPCB)

Duration of the Project: October 2023 – March 2025

Broad Objectives:

1. To conduct detailed noise mapping across various regions of Goa to assess spatial and temporal variations in noise levels and identify critical high-noise zones.
2. To identify noise pollution hotspots through analysis of mapping data, traffic patterns, and urban activities that contribute significantly to elevated noise levels.
3. To develop a comprehensive mitigation plan with feasible control measures and policy recommendations aimed at reducing noise pollution and improving public health and environmental quality in Goa.

Out of all the beaches, only nine have been identified where sound check stations are present, and the music levels are notably high. In these areas, the installation of transparent noise barriers has been recommended to mitigate sound disturbances. The proposed locations for these noise barriers are marked on the maps (one is shown for reference below). (Total length of the noise barriers proposed is approx. 5 kms out of 105 kms coastal area beaches 4.7 % of the total length.)

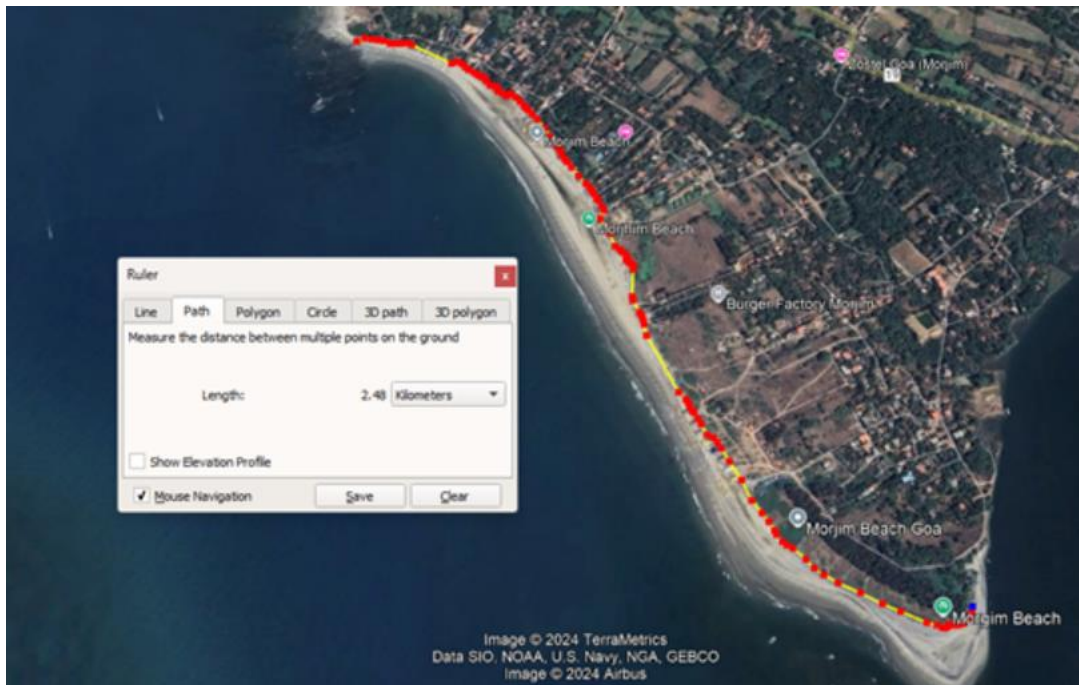


Photo 48. Noise mapping site locations

Methodology:

The following field studies were conducted to meet the study objectives. A brief overview of each is provided below.

- 1) **Classified Traffic Volume:** Traffic volume data was collected at 34 identified intersections over a 24-hour period on a typical working day to estimate hourly volumes, peak hour volumes, and turning movements. Signal phasing and timing data were also recorded, which will be valuable for signal synchronization. Additionally, the classified traffic volume data will aid in developing noise mitigation plans and in recommending the implementation of grade-separated intersections or improvements to existing road geometry at these intersections.
- 2) **Speed and Delay Survey for Public and Private Transport:** The quality of traffic flow is assessed based on the journey speed and running speed of vehicles. The ratio between running speed and journey speed reflects the flow quality: a higher ratio indicates better flow quality, while a lower ratio signifies more frequent speed changes and poorer flow quality. Speed and delay surveys for public transport were **conducted along major** public transport corridors. Approximately 100 km of the study road network was selected for these surveys.
- 3) **Noise Monitoring Survey:** Key locations for monitoring were chosen based on their proximity to high-traffic areas, residential zones, commercial centers, industrial zones, and recreational areas. Specific sites include major intersections, residential neighborhoods, commercial and industrial areas, beaches, and major transport routes.
 - (i) Noise monitoring was conducted at 34 intersections over a 24-hour period using sound level measurement instruments.

(ii) Noise monitoring was conducted three times at over 100 city locations (morning, afternoon, and evening) using sound level measurement instruments.

(iii) Noise monitoring was conducted at locations, including beaches, industrial areas, and forests, at three different times of the day (morning, afternoon, and evening) using sound level measurement instruments.

4) Land Use Survey: The land use survey was conducted to analyze the distribution and patterns of land use within the study area. Data was collected through field observations on both sides of each corridor during the noise monitoring survey, as well as from existing land use records. Additionally, a questionnaire survey was administered to residents living in buildings within the area. This comprehensive data collection approach helps in understanding land utilization and its impact on traffic patterns and infrastructure needs. The insights gained will be instrumental in planning and developing strategies, especially for managing noise mitigation plans for residential and institutional areas near major roads.

Recommendations: A few are listed below –

- There is no need for noise barriers at Candolim, Anjuna, Miramar, and Sinquerem beaches, as the residential areas are located at a considerable distance from these locations. The separation minimizes the impact of any beach-related noise on nearby communities, making additional noise control measures unnecessary.
- Music systems at popular tourist beaches could have an automatic shutdown mechanism that deactivates the system when noise levels exceed 90 dB(A). This could help manage noise levels, which can significantly vary and impact both health and wildlife.
- Noise-generating machinery, including music systems on beaches, might be placed on polyurethane (PU-closed cell) or rubber pads of at least 20 mm thickness to control noise and vibration.
- Installing transparent noise barriers made of 15 mm polycarbonate sheets with a height of 5 meters could be beneficial. These barriers could be set up at the sides and back of music setups, with the front facing the sea and slightly curved towards it to reduce noise spill over.

Listed below are a few recommendations proposed to manage noise pollution in industrial areas:

- In areas where diesel generator (D.G.) sets or heavy machinery are in use, placing a polyurethane (PU-closed cell) layer of at least 20 mm thickness on the ground surface could help in controlling noise and vibration.
- Industries engaged in high-noise activities, such as stone breaking or steel cutting, could benefit from installing a polyurethane (PU-closed cell) layer of at least 20 mm thickness on the ground to reduce noise and vibration levels.
- Providing noise barriers or appropriate acoustical treatments as enclosures for noise-generating machines in heavy industries could help reduce noise and airborne vibrations at the source, thereby protecting both workers and nearby residents.
- Workers in areas where noise levels are high may need to use earplugs to avoid exposure to harmful noise levels, which can reach up to 107 dB(A). If noise levels exceed 70 dB(A) within a 24-hour period, using ear protection could be made mandatory.
- If noise levels from industrial activity exceed 70 dB(A) hourly near boundary walls, industries could consider installing noise barriers on these walls to protect neighboring residential or industrial units from excessive noise.



Photo 49. Noise Mapping In Night At Bolshe Circle 2023



Photo 50. Noise Mapping In Night At Bolshe Circle 2045

Conclusion: To mitigate noise pollution in key areas of Goa city, it is essential to install noise barriers in identified hotspot locations. These hotspots are typically areas with high traffic congestion, busy commercial zones, and regions near residential complexes where noise levels frequently exceed permissible limits. Noise barriers act as an effective solution to reduce sound transmission from highways and major roadways, improving the overall living conditions and reducing environmental noise impacts.

Traffic Engineering and Safety

RESEARCH PROJECTS

Investigation of Strategic Placement of Wireless Power Transfer (SWPT) Systems for Battery Electric Buses (BEB) on Selected Corridors

Funding Agency: CSIR-CRRI, New Delhi

Duration of the project: From February 2024 to March 2026

Broad Objectives:

- (a) To allocate optimal wireless charging facilities (stationary and semi-dynamic) required for electrified transit buses at selective corridors in Delhi.
- (b) To investigate the economic feasibility of wireless charging systems for electrified bus transit system.

Wireless charging offers the potential to charge battery electric bus (BEB) at regular stops without requiring extensive dwell times or infrastructure alterations, thereby integrating seamlessly into urban environments. However, optimizing such systems requires considering numerous factors, including battery capacity, initial state of charge (SOC), and the operational constraints of bus routes. Irrespective of recent development in terms of attempts made on Strategic Placement of Wireless Power Transfer (SWPT) placements for BEB corridors elsewhere, several pertinent questions need to be answered in Indian context which encompass the following:

- How can charging pad placement be optimized to minimize costs while meeting the energy demands of buses?
- What is the impact of initial SOC on the feasibility and cost of the wireless charging system?
- How do single-trip and multiple-trip scenarios influence the design and efficiency of the charging infrastructure?

The major contribution in this study encompasses employing a mixed-integer linear (*MILP*) approach to determine the optimal placement of wireless charging pads at bus stops across multiple bus routes (refer Figure 8). The findings are expected to help the in making decision-making for public transit authorities, supporting the adoption of sustainable and efficient EV systems.

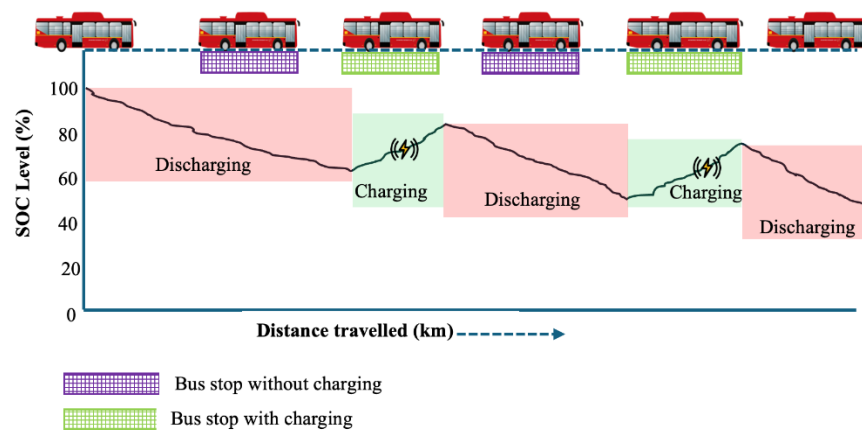


Figure 8: Typical layout of SWPT charging system at bus stops showing SOC variation over distance

The findings from this study underscore the critical role of initial SOC optimization, tailored infrastructure design and strategic planning in achieving cost-effective and sustainable operations for public electric buses. This research provides a foundation for future studies and practical implementations in wireless charging infrastructure for electric buses, paving the way for sustainable and efficient urban transit systems (refer typical illustration in Figure 9).

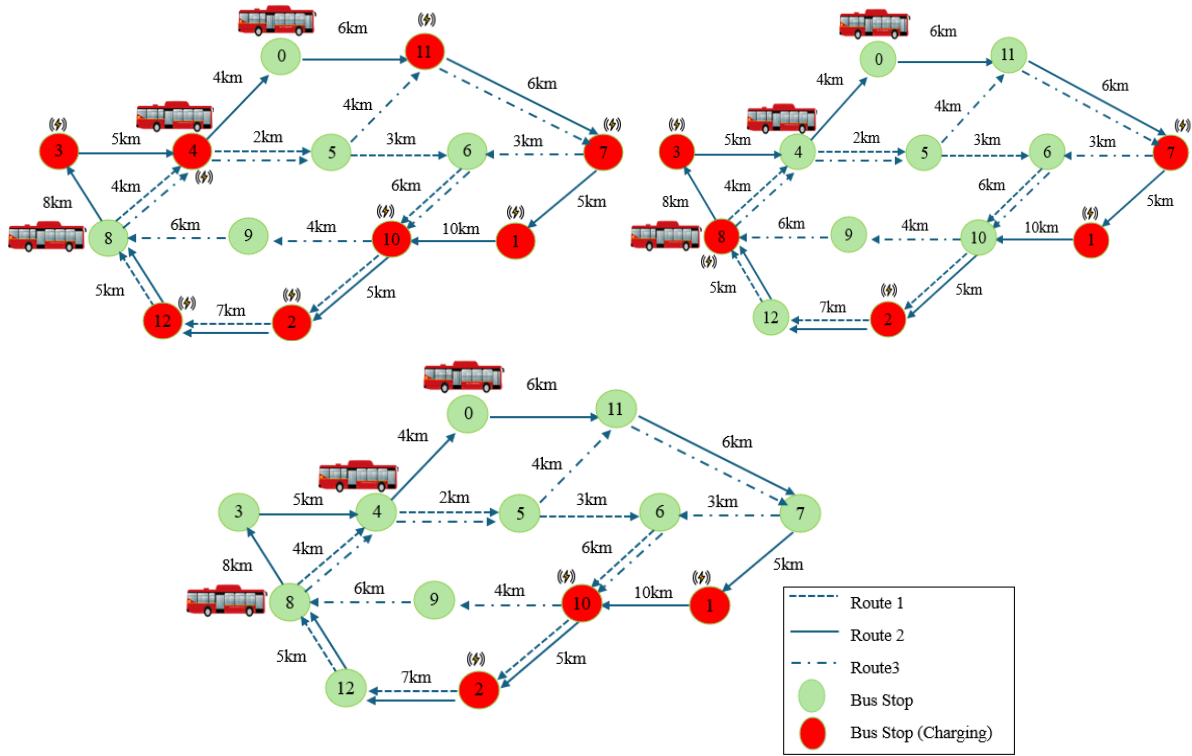


Figure 9: Optimized SWPT charging bus stops for single trip (a) I.SOC: 50 % (b) I.SOC: 55 % (c) I.SOC: 60 %

CONSULTANCY PROJECTS

Road Safety Audit (RSA) and Design for the PWD North and North East Zone Roads in the State of Karnataka (Package - 1) under KSHIP-3 Project

Sponsoring Agency: Karnataka State Highway Improvement Project (KSHIP), Karnataka.

Joint Venture with CSIR-Central Road Research Institute and M/s. LEA Associates South Asia Pvt. Ltd.

Duration of the project: From January 2023 to December 2025

Broad Objectives: The objective of the consultancy services is to provide quality technical support to assess, design, and supervise defined road safety features on the state highways in the core road network of Karnataka. In achieving these objectives, the RSA is required to provide all requisite assistance and support to the PIU-KSHIP in compliance with ADB's policies for project design and implementation.

Scope: The scope of the project is listed below

- Review of the road safety audits carried out earlier by Planning and Roads Asset Management Centre (PRAMC) (around 270 Kms)
- Review of the road safety audits carried out earlier under KSHIP- II (around 230Kms)
- Detailed Road Safety Audit of SH/MDR under the CRNM (around 7000Kms)
- iRAP assessment of SH/MDR under the CRN in North and North East zone PWD Roads
- Training on Road Safety Audit, iRAP Assessment, Road Safety Awareness and Campaigns, Work Zone Safety as part of DPR

Summary of the work: As part of the project, road safety audits were conducted and crash prone spots i.e. black spots were identified coupled with suggesting appropriate remedial measures. The suggested RSA and blackspot remedial measures were presented and discussed in the district-level Workshops held in the state of Karnataka (refer Photo 48).



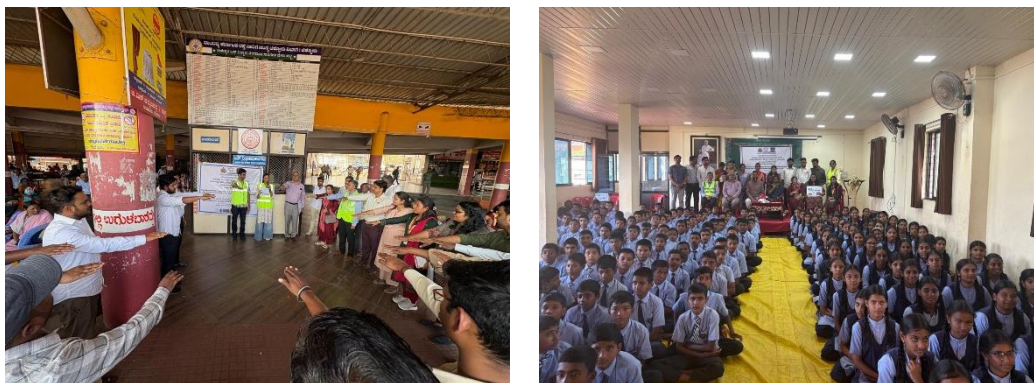


Photo 51: Glimpses of the workshops held in Karnataka

Pre-Opening Stage Road Safety Audit of Urban Extension Road Package - II

Sponsoring Agency: National Highway Authority of India (NHAI)

Duration of the project: From April 2024 to March 2025

Broad Objectives: The study road sections were subjected to Pre - opening stage Road Safety Audit where the construction is in the verge of completion and thus awaiting the clearance for the Completion Operation Date (COD).

The details of the sections and packages are described below:

- **Dwarka Expressway:** It is an elevated grade separated access-controlled carriageway connecting Dwarka in Delhi to Kherki Daula Toll Plaza, Gurgaon in Haryana. The package details are as follows:
 - Package 3: Delhi/ Haryana border to Basai Rail Over bridge (ROB) (Km 9.5 to Km 19.70), length: 10.2 km
 - Package 4: Basai ROB to Kherki Daula (Km 19.70 to Km 28.5), length: 8.8 km
 The above corridor is a six-lane divided carriageway with elevated service roads of three-lane on either side and at grade six-lane divided road.
- **UER-II:** It is a six-lane access-controlled road elevated at some places with service roads on either side. The package details are as follows:
 - Package 3: Nangloi – Najafgarh Road till Sector 24 Dwarka (Km 28.450 to 38.111), length: 9.661 km

The action plan generated from the above RSA, leading up to the Commercial Operation Date (COD) Operations are summarized below.

- i) Given that the main carriageway of the project corridor is an eight lane urban expressway, it is recommended to install distinct Speed Limit Sign Boards indicating 100 Kmph for Light Motor Vehicles (LMV) and 60 Kmph for Heavy Motor Vehicles (HMV) on the main carriageway of the Expressway. However, in the case of the Service Road having a Six Lane Divided Configuration, it is suggested speed limits are 60 Kmph for LMV and 40 Kmph for HMV (*refer Figure 4*) considering the fact that it will be used by all types of Motorised Vehicles as well as Non-Motorized Traffic and movement of pedestrians due to Bus Stops / Bus Bay located on the edge of the Service Road.
- ii) In addition to the above recommended posting of the Mandatory Speed Limit Signs, it is recommended to provide Overhead Lane Sticking Signs combining with the applicable Speed Limits of 100 Kmph and 60 Kmph *at the earmarked locations* on the MCW of the

Expressway. Moreover, since the MCW of the Expressway has eight-lane divided carriageway having four lanes on either side, it is recommended to post two numbers of Overhead Lane sticking signs with 100 Kmph containing the Car picture on the Median Lane and Traffic Lane adjacent to the median whereas the remaining two lanes shall have heavy vehicle picture.

- iii) It is essential to post the Exit Sign which is to be posted at least 2 km before the designated exit locations conforming to Ministry Circular dated 20.7.2023. Exit sign board shall be sequential numbered by taking the number of Exits from the start of the corridor along with direction sign prior to the exit of expressway.
- iv) Though the signs boards indicating the shared cycle track and pedestrian footpath signs have been installed at designated locations adjacent to the edge of the Service Road, the construction of the same is incomplete. It is advisable to complete the shared facility before opening it for road users.
- v) Pedestrian crossing Zebra Marking and Sign are missing in a few of the Major and Minor Intersections located at the Intersecting Road with the Service Roads. These shall be thoroughly enumerated by the concessionaire and prepare a checklist of the missing locations so that needful can be done before the formal opening of the Project Corridor.
- vi) In some of the Minor Roads intersecting with the Service Roads (*which will have high speeding traffic due to Six Lane Divided Configuration*), in addition to Stop Sign provided on the ground, it is recommended to provide Stop Line Marking, Pedestrian Crossing Sign, Object Hazard Marker (OHM) Sign and the construction of Speed Table [*conform to IRC:99 (2018)*] along with the Pedestrian Crossing Marking which shall be done conforming to IRC:35 (2015),
- vii) VMS gantry at two locations have been erected, however not yet commissioned. Foundation of such gantry need to be reinforced by placing the OHM upfront.
- viii) At the Cloverleaf merging with the NH-48 i.e. *Delhi - Jaipur Highway*, it is observed that there are obsolete Chevron Markings which can cause drivers to make incorrect turns. To address this issue, it is recommended to rectify the same by mask the outdated markings with black paint. Additionally, it was noticed that the impact attenuators have not been installed in the gore area. To enhance safety in these areas, it is recommended for the placement of 9 sets of Sand Filled Impact Attenuators by taking into consideration the available space at also such gore areas.
- ix) CSIR - CRRI team assessed the illumination levels of street lighting on the MCW of the Expressway and Service Road during night-time at selected locations. The analysis revealed that the illumination level is more than 40 Lux conforming to IRC: SP-84 (2014) and IS:3944. However, there are certain locations on the median and shoulder, such as chainage Km 21/500, Km 24/400, and Km 26/600, where the lux level falls below 40. To ensure the safety and convenience of nighttime road users, it is recommended to enhance the illumination levels at these specific locations.
- x) Lighting conditions at most of the VUPs are fairly good, however in one of the VUPs, lights are yet to be installed. Similarly, another VUP doesn't have sufficient lighting due to the vandalism. Prior to opening to the road users, all three VUPs should be checked for adequate lighting during nighttime.

Based on the above findings that emanated out of the above Pre-Opening Stage Road Safety Audit, the list of safety issues pointed out in this report need to be implemented on the ground and afterwards only, the Project Corridor can be considered for granting Commercial Operation Date (COD) certification by NHAI.

Comprehensive Traffic Management Study for Limestone Lease Expansion Project based at Kutch

Sponsoring Agency: M/s Sanghi Industry Limited (SIL), Adani Cement

Duration of the project: From May 2024 to July 2024

Broad Objectives:

- (a) To conduct the traffic assessment of the existing corridor and project the traffic growth in future.
- (b) To provide traffic management measures if any required to improve the capacity of the corridor

SIL is now part of Adani group since December 2023. The above referred unit is located at Sanghipuram, Village Motiber, Taluka Abdasa, District Kutch, Gujarat, with the present clinker production capacity of 7.5 million tonnes per annum (TPA) and the cement production capacity of 8.6 million TPA by catering to traffic flow and material production (refer Photo 49, Figures 10 and 11).



Photo 52: Jadua Limestone Mines, Kutch

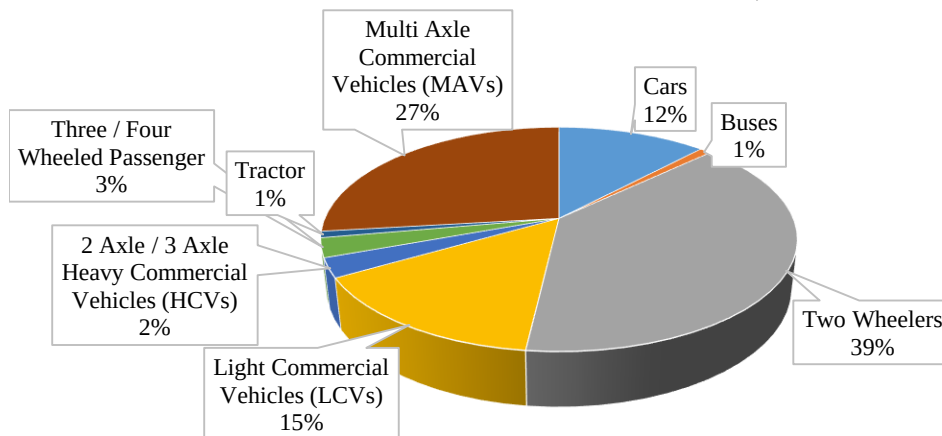


Figure 10: Traffic Composition from Plant to Motiber Chowk

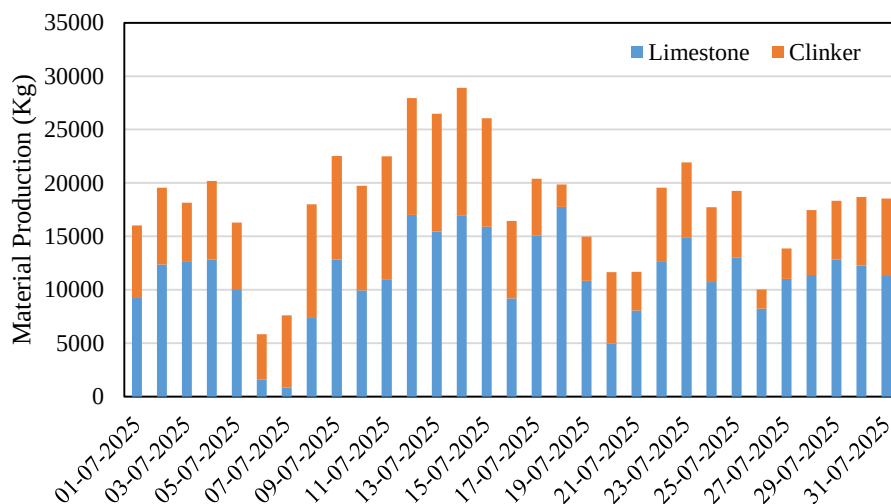


Figure 11: Material production in the month of July 2025

A comprehensive evaluation of the prevailing traffic conditions, together with the projected traffic demand arising from the proposed expansion of limestone mining and associated transportation activities, indicates that the haul road is currently functioning at Level of Service (LOS) A. The jetty road, on the other hand, is operating at LOS C, which reflects a moderate to high traffic volume. These findings confirm that the haul road is within the safe capacity thresholds stipulated by the Indian Roads Congress (IRC) guidelines, however Jetty road requires widening. Accordingly, the existing infrastructure is deemed sufficient to accommodate both the present and anticipated traffic volumes associated with the expansion of clinker and limestone production. In light of these outcomes, a series of technical recommendations has been formulated to achieve operational efficiency and thus help to enhance road safety.

Evaluation and Testing of SPG drivers

Sponsoring Agency: Special Protection Group (SPG), 9-Race Course Road, New-Delhi-110001

Duration of the project: From Jan 2024 to September 2024

Broad Objectives: Evaluation & Testing of the Drivers

In this project 114 from Special Protection Group were administered, different psychomotor ability test and driving tests i.e. Car driving simulation test, action judgment test, and simple and complex reaction time test, depth perception test (judgment of height, distance and width), night vision and glare test, visual acuity test, driver behaviour rating scale (field testing). Three/ Four drivers on each day were tested & evaluated. Visual and psychomotor ability tests were administered to each subject.

i) Driving Simulation test: In this test, 24.66 % drivers were assessed as “Excellent” 30.33 % drivers fell under” Very Good” whereas 45 % drivers performed “Good”.

ii) Reactive capacity (Complex Reaction Time) Test: This test is done with Vienna Test system. In this test 7% drivers performed as “Excellent”, 22.33 % as “Very Good”, and 70.66 % performed as “Good”. None of the driver performed outstanding which shows that the present sample was having “Very Good”/ “Excellent” safety related performance.

iii) Driver Behaviour Rating Scale: 23.66% drivers performed “Outstanding” 38% drivers performed “Excellent”, 28% drivers performed “Very Good” and 10.33% drivers performed as “Good”. Most of the driver performed “Very Good” highlighting the present sample characteristic.

COMPULSORY TESTS

i) Glare Recovery Test: This test measures how quickly the drivers can come out of the glare effect caused by the head lights of oncoming vehicles. This test is being conducted by Keystone unit. In the present sample 100 % drivers have “Outstanding” glare result.

ii) Night Vision Test: This test measures driver’s ability to see accurately in darkness. This test is being conducted by Keystone unit. In the present test 100% drivers have “Outstanding” night vision result.

iii) Road Sign Test: This test has been developed to measures the awareness level of the Drivers related to different (mandatory, information, warning signs of the road). In this test 49.66 % performed “Outstanding”, 30.33 % performed “Excellent”, and 20 % performed “Very Good”), which shows that some drivers have to improve in the awareness regarding road signs and road rules.

iv) Visual Acuity Test: This test measures the sharpness of driver’s vision which is basic requirement for safe driving. This test is performed by using Keystone unit. This test measures Driver Vision (Far & Near). Most of drivers were having outstanding eye sight (6/6).

v) Eye Tracker Test: It was used to find out attention behaviour of the drivers in terms of the Gaze plots & Heat maps.

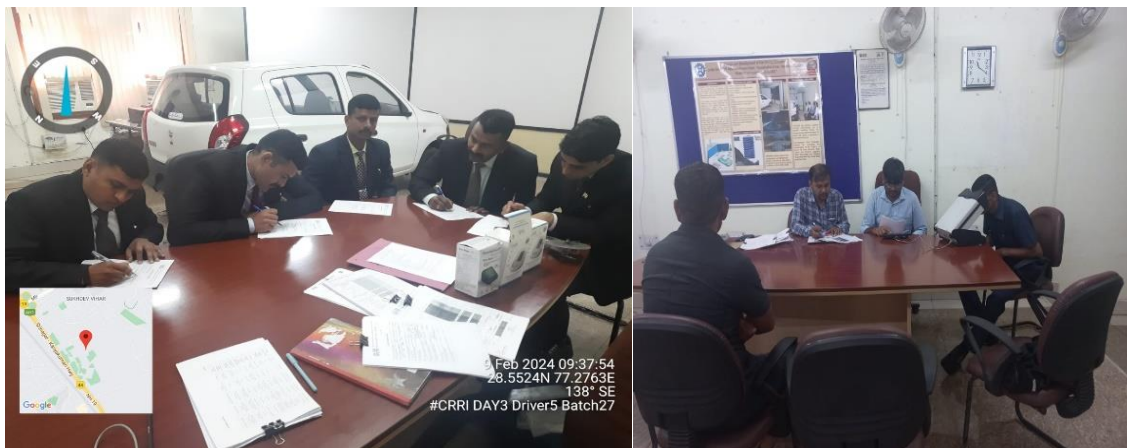


Photo 53: Vision Test & Road Sign Test



Research & Development Management Divisions

- ❑ Information, Liaison & Training (ILT)
- ❑ Planning, Monitoring & Evaluation (PME)
- ❑ Knowledge Resource Centre (KRC)
- ❑ Computer Centre & Networking (CCN)
- ❑ Maharani Bagh Staff Quarters Maintenance
- ❑ Mechanical and Transport
- ❑ Quality Management
- ❑ राजभाषा
- ❑ Administration

Information, Liaison & Training

Information, Liaison & Training

The Information, Liaison & Training Division acts as a nodal point between the Institute and outside agencies for promotion, utilization and implementation of the Institute's knowledge base. The main activities of the division include the dissemination of information, research liaison, initiating marketing & technology transfer of the Institute's knowledge base; development of human resources & organizing specialized training programs for the highway and transportation professionals. Dissemination of R&D products is promoted through a variety of channels, viz. Publications of Annual Reports, Newsletters, Profiles / Brochures; Organisation of National Get-Together /Conferences/Workshops& Participation in Technical Exhibitions to popularize the significant achievements.

ILT makes efforts to disseminate information, activities, findings and recommendations by organizing various workshops and conferences at CSIR-CRRI through exchanging information and knowledge transfer on roads and roads related areas.

The main services offered by ILT include the following.

- ☐ Human Resource Development
- ☐ Specialized Training Programmes for Highway Engineers
- ☐ Dissemination of Road & Road Transport related Issues
- ☐ Important Days Celebrations / Events Management
- ☐ Technical Exhibitions related to Road and Road Transport
- ☐ Publications of Annual Reports, Newsletters & Profiles, etc.
- ☐ Initiating Technology Transfer and Marketing of the Institute's Knowledge Base
- ☐ International Scientific and Technological affairs
- ☐ Information Collection, Analysis & Management
- ☐ Organisation / management of Jigyasa Programme events
- ☐ Facilitation of M.Tech & B.Tech students for their Thesis / Dissertation works.

Human Resource Development Programme

Human resource development is a philosophy of management and is purported to upgrade the capabilities and professional skills of the personnel working in an organization to match the changing work demands. To enhance the professional capabilities of scientists and scientific staff for undertaking the R&D work in frontline areas of highway engineering and with the urge to develop technologies which have competitive edge and marketable strength, CSIR-CRRI has been devoted in human resources development. Realizing the need for skill development and capacity building of the human resources, training programmes were identified /selected. Staff members received specialized training in the areas of their expertise to cope up with the challenging assignments. The details of those who attended various training programmes and the specialized areas of training are given in section "Participation in Training Programs / Short Term Courses (Outside CRRI).

Institute's Publications

CSIR-CRRI Technical Profile 2026

During the year, CSIR-CRRI Technical Profile 2026 was published in January 2026. The Technical Profile 2026 contained latest achievements / significant contributions of the Institute along with calendar for year 2026.

CSIR-CRRI Field & Project Work Record Book 2026

During the year, CSIR-CRRI Field & Project Work Record Book 2026 was published in January 2026. The Field & Project Work Record Book 2026 contained latest information related to Head of Departments / Sections of the Institute along with date wise record entry book.

CSIR-CRRI 134th Research Council Meeting Progress Report, July 09-10, 2025

The report contains detailed information related to the various events, conferences, workshops, training programs and other events organized by CSIR-CRRI and other information on participation in technical exhibitions, conferences, short term training programs (outside CSIR-CRRI), distinguished visitors to the Institute, deputation abroad and students' thesis / dissertation supervision etc. since the last RC meeting in January 2025.

CSIR-CRRI 135th Research Council Meeting Progress Report, November 25-26, 2025

The report contains detailed information related to the various events, conferences, workshops, training programs and other events organized by CSIR-CRRI and other information on participation in technical exhibitions, conferences, short term training programs (outside CSIR-CRRI) by CSIR-CRRI staff members, distinguished visitors to the Institute, deputation abroad and students' thesis / dissertation supervision etc. since the last RC meeting in June 2025.

CSIR-CRRI Technical Posters for showcasing in Mega Exhibitions

Various technical posters related to latest major projects undertaken, equipment / facilities developed by CSIR-CRRI were compiled, edited and printed / published for showcasing in mega exhibitions.

CSIR-CRRI Training Calendar / Brochure for the year 2025-2026

A training calendar that contains title and schedule of each regular and customized training programme was also published during the period.

Documentation of materials for CSIR Annual Reports, Quarterly and Monthly Reports etc.

During the period, various materials were documented for CSIR Annual, Quarterly and Monthly Reports and others publications and submitted to the concerned departments / sections in time.

Technical Exhibitions

The Institute organized / participated in the technical exhibitions organised during the conferences / events listed below and depicted CSIR-CRRI's expertise, capabilities and R&D achievements during the year.

1st World Symposium on Sustainable Transport & Livability (WSSTL)-2025

The Special Interest Group (SIG)-F4 of World Conference on Transport Research Society (WCTRS), together with Department of Civil Engineering, Indian Institute of Science (IISc), Bangalore, India, organized the 1st World Symposium on Sustainable Transport & Livability (WSSTL-2025) during June 25-27, 2025 at IISc, Bangalore. As part of the symposium, a technical exhibition was organised for the various stakeholders, and CSIR-CRRI participated in the expo by showcasing some of the significant projects undertaken / achievements in the field of transportation planning, road traffic and safety.



Seminar on “Full Depth Recycling and Green Technologies in Road Construction”

Indian Roads Congress (IRC) in association with UPRRDA, Govt of Uttar Pradesh organized the two days Seminar on “Full Depth Recycling and Green Technologies in Road Construction” on 29th & 30th August, 2025 at Indira Gandhi Pratishthan, Lucknow, Uttar Pradesh. As part of this seminar, CSIR-CRRI participated in the technical expo organized for various stakeholders. During the expo, CSIR-CRRI showcased some of its major projects and achievements in the field of Road and Transportation Sector.

India International Symposium on Acoustics: Acoustical Science and Technology for Quality of Life (IISA-2025)

CSIR-CRRI participated as an exhibitor in IISA-2025, organised by K-IIT College of Engineering, Gurugram, India, during October 30-November 01, 2025. During the symposium, CRRI showcased various significant projects undertaken and major achievements of the Institute.

Technical exhibition of the 84th Annual Session of Indian Roads Congress

CSIR-CRRI participated in the technical exhibition of the 84th Annual Session of Indian Roads Congress during November 06-10, 2025 at Bhubaneswar, Odisha. During the expo, CSIR-CRRI showcased some of its major projects and achievements in the field of Road and Transportation Sector.

Technical Exhibition of 11th Edition of India International Science Festival (IISF)-2025

CSIR-CRRI participated in the technical exhibition of 11th Edition of India International Science Festival (IISF)-2025 organized during December 06-09, 2025 at Panchkula, Haryana



Technical Exhibition of 8th Conference of Transportation Research Group of India (CTRG-2025)

CSIR-CRRI participated in the technical exhibition of 8th Conference of Transportation Research Group of India (CTRG-2025) jointly organised by TRG and IIT Guwahati during December 17-20, 2025 at IIT Guwahati, Assam



Global Road Infratech Summit & Expo (GRIS-2026)

CSIR-CRRI participated in the technical exhibition of Global Road Infratech Summit & Expo (GRIS-2026) organised by the International Road Federation-India Chapter on February 05 & 06, 2026 at Hotel Ashok, New Delhi.



National Exhibition-cum Technical Meet under Mission Shah-Sankalp

CSIR-CRRI participated in the National Exhibition-cum Technical Meet under Mission Shah-Sankalp organised by the Office of the Principal Scientific Adviser to the Govt. of India on March 18, 2026 at Dr.

Ambedkar International Centre, New Delhi. During the exhibition, CSIR-CRRI showcased some of the major significant projects / achievements / equipment developed by the Institute that can contribute to resilient and self-reliant livelihood systems in line with the vision of Atmanirbhar Bharat.



Other Activities

Dissemination of Publications

The Institute's R&D publications such as its Annual Report, Newsletters and Training Calendars were sent to highway professionals, engineering & academic organizations in the country and abroad. The publications are meant to disseminate R&D based information to the road and transportation engineering professionals / fraternity.

Technical Queries

Technical queries concerning the R&D activities and technical know-how of the Institute were attended. Information on various technologies developed by the Institute were sent to a number of organizations dealing with databases, technology transfer and consultancy assignments pertaining to roads and road transportation.

Press Publicity

Various local press approached CRRI for information on research & developments and studies carried out by the Institute on roads, flyovers, bridges etc. The needed information was provided to the press for the purpose of awareness and publicity.

Press clipping pertaining to road and road transport in particular and Science and Technology in general were culled out from various National dailies and were brought to the notice of the Director and circulated to staff members for information, if needed. These were also compiled in the form of documents.

Publicity through CRRI Advertisement

To popularise the Institute's past R&D achievements and present R&D programmes, capabilities, facilities and expertise, the Institute issued various advertisements at various forums. One such forum was the scientific documents brought out by various organizations on different occasions. The Institute published its various advertisements in the documents brought out by the various organizations on the different occasions.

Publication of Research Outputs

Research Papers emanating from the R&D work were prepared and submitted for publication in various National & International Journals/Conferences by individual staff members. Once the papers were accepted for publications, cases pertaining to deputation of CRRI Scientists to attend various Conference/Symposia were processed by this division.

Visitors

Visits of distinguished professionals and delegates from various organizations related to road and road transportation from India and abroad to CRRI were organized facilitated during the year. The details of the visitors during the year are given in Chapter "Visitors".

Linkages with Professional Bodies

The Institute is represented as the Institutional Member on the various technical, executive and administrative committees and groups of various National and Foreign Organizations. These organizations

maintain their databases including R&D activities, organizational heads, etc. of the Member Institutions and regularly seek the updated information. The updated information on CRRI was provided to various organizations and the annual subscriptions were paid to continue the membership. The Institutional membership of the Institute is given in section “Membership of National and International Organisations”.

Training Programmes / Courses

Regular Training Programmes

Skill development of human resources by imparting training to the engineers of the user agencies / organizations is an integral part of the research and development programme of the Institute. During the last fiscal year, following refresher courses / training programmes for engineers / professionals of the user organizations related to roads and road transportation in the Govt., Public & Private Sectors were organized. Through these programmes, the Institute imparted training to the junior, middle and senior level engineers of the user organizations and acquainted them with the latest research based information on various aspects of road and road transportation.

During the last fiscal year, the institute conducted following regular training programmes as listed below.

1. CSIR-CRRI conducted a 5-day regular training program on “Pavement Evaluation Techniques and their Applications for Maintenance & Management” during July07– 11, 2025, at CSIR-CRRI, New Delhi. The training program was inaugurated by Dr. S. Velmurugan, Chief Scientist, CSIR-CRRI, and attended by 23 officials from various parts of India



2. CSIR-CRRI conducted a 5-day regular training program on “Design of Bridge Structure and Foundation” during August04-08, 2025, at CSIR-CRRI, New Delhi. The training program was inaugurated by Dr. S. Velmurugan, Chief Scientist, CSIR-CRRI, and attended by 19 officials from various parts of India



3. CSIR-CRRI conducted a 5-day regular training program on “Design, Construction, Quality Control and Maintenance of Rigid Pavement” during August 25 – 29, 2025, at CSIR-CRRI, New Delhi. The training program was inaugurated by Prof. Manoranjan Parida, Director, CSIR-CRRI, and attended by 10 officials from various parts of India



4. CSIR-CRRI conducted a 6-day regular training program on “Road Asset Management (RAM)” during September 22-27, 2025, at CSIR-CRRI, New Delhi. The training program was inaugurated by Dr. E. Madhu, Chief Scientist, CSIR-CRRI, and attended by 18 participants from various parts of India.



5. CSIR-CRRI is conducting a 5-day regular training programme on “Design, Construction and Quality Control in Flexible Pavements” from December 29, 2025 to January 02, 2026, at CSIR-CRRI, New Delhi. The training program was inaugurated by Prof. Manoranjan Parida, Director, CSIR-CRRI, and attended by 11 participants from various parts of India.



6. CSIR-CRRI conducted a 5-day regular cum customized training programme on “Quality Assurance, Health Assessment and Rehabilitation of Bridges” during January 19, 2026 to January 23, 2026 at CSIR-CRRI, New Delhi. The training program was inaugurated by Dr. Ch. Ravi Sekhar, Director, CSIR-CRRI, and attended by 65 participants from various parts of India.



7. CSIR-CRRI conducted a 5-day regular training programme on "Design, Maintenance and Management of Airfield Pavements" during February 02-06, 2026 at CSIR-CRRI, New Delhi. The training program was inaugurated by Dr. Ch. Ravi Sekhar, Director, CSIR-CRRI, and attended by 14 engineers from various parts of India.



Customized Training Programmes

Besides the regular training programmes, the Institute also conducted customer oriented /customized training programmes to meet the specific training requirements of the user agencies. During the last fiscal year, the Institute conducted the following customized training programmes as listed below.

1. CSIR-CRRI conducted a 3-day customized training program on “Design, Construction and Quality Control in Flexible & Rigid Pavements for the MPPWD Engineers” during April 02–04, 2025, at CSIR-CRRI, New Delhi. The training program was inaugurated by Prof. Manoranjan Parida, Director, CSIR-CRRI, and attended by 34 officials sponsored by Madhya Pradesh PWD, Govt. of Madhya Pradesh, India.



2. CSIR-CRRI conducted a 3-day customized training program on “Design, Construction and Quality Control in Flexible & Rigid Pavements for the MPPWD Engineers” during April 07– 09, 2025, at CSIR-CRRI, New Delhi. The training program was inaugurated by Prof. Manoranjan Parida, Director, CSIR-CRRI, and attended by 36 officials sponsored by Madhya Pradesh PWD, Govt. of Madhya Pradesh, India.



3. CSIR-CRRI conducted a 3-day customized training program on “Design, Construction and Quality Control in Flexible & Rigid Pavements for the MPPWD Engineers” during April 21– 23, 2025, at CSIR-CRRI, New Delhi. The training program was inaugurated by Prof. Manoranjan Parida, Director, CSIR-CRRI, and attended by 36 officials sponsored by Madhya Pradesh PWD, Govt. of Madhya Pradesh, India.



4. CSIR-CRRI conducted a 3-day customized training program on “Quality Assurance, Health Assessment and Rehabilitation of Bridges for the MPPWD Engineers” during January 19-23, 2026, at CSIR-CRRI, New Delhi. The training program was inaugurated by Dr. Ch. Ravi Sekhar, Director, CSIR-CRRI, and attended by 45 engineers nominated /sponsored by MPPWD, Govt. of Madhya Pradesh, India.



5. CSIR-CRRI conducted a 5-day customized training programme on "Road Safety Audit & other Road Safety Related Aspects" for the engineers of Madhya Pradesh Public Work Department (MPPWD) during February 09-13, 2026 at CSIR-CRRI, New Delhi. The training program was inaugurated by Dr. Ch. Ravi Sekhar, Director, CSIR-CRRI, and attended by 37 engineers nominated /sponsored by MPPWD.



15-day Road Safety Audit Certification Course

CSIR-CRRI conducted a 15-day Certification Course on “Road Safety Audit and Other Road related aspects” during May 13-28, 2025. The training program was inaugurated by Prof. Manoranjan Parida, Director, CSIR-CRRI, and attended by 63 participants from various parts of India.



Any other Training Programs

1. A 5-day training program on "The Application of Geo-synthetics in Road Infrastructure Projects" was jointly organised by NTTM, under the Ministry of Textiles and CSIR- Central Road Research Institute (CSIR-CRRI) in association with Galgotias University during April 07-11, 2025. The training programme was inaugurated by Prof. Manoranjan Parida, Director of CSIR-CRRI on April 07, 2025 at Galgotias University, Greater Noida, Uttar Pradesh.
2. A 5-day training program on "The Application of Geo-synthetics in Road Infrastructure Projects" was jointly organised by NTTM, under the Ministry of Textiles and CSIR- Central Road Research Institute (CSIR-CRRI) in association with NIT Goa during April 14-18, 2025. The training programme was inaugurated by Prof. Manoranjan Parida, Director of CSIR-CRRI on April 14, 2025 at NIT Goa.
3. A 5-day training program on "The Application of Geo-synthetics in Road Infrastructure Projects" was jointly organised by NTTM, under the Ministry of Textiles and CSIR- Central Road Research Institute (CSIR-CRRI) in association with VNR Vignana Jyothi Institute of Engineering & Technology during April 21-25, 2025. The training programme was inaugurated by Prof. Manoranjan Parida, Director of CSIR-CRRI on April 21, 2025 at VNR Vignana Jyothi Institute of Engineering & Technology, Hyderabad.
4. CSIR-CRRI conducted a 5-day short-term training course titled “Applications of Geosynthetics in Road Infrastructure Projects” during November 16-20, 2025, at NIT Warangal. The training program, funded by the Ministry of Textiles, Government of India, under the National Technical Textiles Mission (Skill Development), was inaugurated by Prof. Manoranjan Parida, Director, CSIR-CRRI, and attended by many students from NIT, Warangal.

Planning, Monitoring & Evaluation

PLANNING, MONITORING & EVALUATION DIVISION

R&D management is the main activity of this Division which inter-alia covers Planning, Monitoring & Evaluation of R&D projects (Sponsored, Collaborative & Grant-in-aid), externally funded projects (Consultancy & Technical Services), issues concerning Intellectual Property knowledgebase and Business Development, attending to technical queries and technical/ performance audits and assistance to Director, Management Council (MC) and Research Council (RC) on the project related matters.

Significant activities that PME Division carried out during 2025-26 are as follows:

PLANNING ACTIVITIES

Project Planning [Fast Track Translational/ Focus Based Research/ other R&D Projects]

PME interacts with scientists for submission of R&D proposals to various funding agencies. During the current year, In-House R&D project proposals and CSIR-funded projects (SSP, CLP, GAP) submitted by the scientists are processed and assisted in preparing Project proposals for submission to various other departments, such as MoRTH, DST, etc., for getting projects.

Management of various Project Proformae

PME designs maintains, manages, and modifies the proforma for various project-related activities as the need arises from time to time in line with ISO requirements/ CSIR guidelines.

Scrutiny & Registration of Project Proposals

Scrutiny and registration of all externally funded projects and allotment of specific identity in terms of a project number are instigated at PME soon after the money for the project is received, along with In-Principle approval. The Division also carries out registration and scrutiny of in-house R&D projects.

Development and Regular Maintenance of Project Database

PME has developed a Project Database, which is regularly updated, incorporating the addition of new projects and modifications during their implementation stage and finally during their completion. The database includes project titles, classification, and technical & financial details, which help track the projects' technical and financial progress. PME also maintains the cash inflow of all the projects. The database is beneficial for monitoring and evaluating projects as well as the generation of reports.

MONITORING ACTIVITIES

Reporting on performance and the status of various projects was carried out from time to time that contains information about the performance of the Institute on various parameters such as projects handled, technologies developed, licensed & transferred. These reports are sent to CSIR for their perusal. These reports also help the Institute in reviewing its performance as a monitoring tool.

PME Division also calls for progress reports of all the ongoing projects, which are meant to monitor and ascertain the status of each project to adhere to the schedule and other milestones. Any deviation is intimated to the respective project leader, and remedial measures are taken to put the project on course. As reported by the respective Project Leaders, completed projects are processed for closure.

CSIRSCDD - Data Collection Portal (S-DCP): This is to ease Data Collection and Management, availability of information, excellence for Data/Information mining, and next-generation knowledge synthesis system maintained by CSIR. PME has compiled and provided/uploaded various inputs/information to the portal from time to time.

Projects Monitoring

Externally funded projects: Externally funded projects were regularly monitored, particularly for their adherence to time schedule, amount dues, if any, documentation, closure, etc., through divisional/ project review meetings.

In-house/ CSIR Funded R&D Projects – These projects were monitored through Meetings, Research Council, and CSIR setup monitoring committees from time to time. PME division has coordinated these activities.

External Cash Flow (ECF): The Institute undertakes projects sponsored by various external agencies such as the Ministry of Road Transport & Highways (MORT&H), National Highway Authority of India (NHAI), Department of Science and Technology (DST), National Rural Roads Development Agency, state government, Industries, PCRA, PSUs & Consultants, etc. The details of External Cash Flow, i.e., money received from these agencies to carry out specified tasks, were regularly recorded and monitored vis-à-vis the target established by the institute.

EVALUATION ACTIVITIES

Projects information to Research Council (RC)/ Management Council (MC)

Research Council (RC) is the apex advisory/monitoring body in CSIR-CRRI, through which the major R&D activities are monitored and evaluated. Also, it gives direction/guidance for future R&D programs of the institute. During the year, PME Division provided various information/data for the Agenda, progress reports of R&D projects, Information for the Director's Presentation, and other related information for meetings.

PME prepares the up-to-date projects summary and provides information on projects to be ratified by the Management Council. In addition, Customer Satisfaction Evaluation and Feedback on the completed project were carried out. The result showed that the clients are delighted with the institute.

Technical Queries from within or outside CRRI and CSIR

PME handles technical queries about various projects. PME is also required to interact with various Directorates of CSIR regarding the preparation of Plans/Budget, Management of FTT, FBR and other R&D Projects, Audit, ECF queries, RTI, other technical information to Ministries, etc. Also interacts with the project clients related to amount dues, schedule, taking satisfaction feedback, etc.

Parliament Questions

PME also handles parliament questions related to CSIR-CRRI activities. During the year, replies to Parliament questions were prepared after collecting, compiling, and collating information from various divisions of the institute.

GST related Activity

The Division regularly prepares the statement on the receipts and ensures the payment by accounts section of GST every month, i.e., GSTR-1, 3B, etc. The PME division coordinated with F&A section, DDO, Stores & Purchase, Civil, and all Scientists for proper implementation of GST in the Institute. The division also, coordinated with Service Tax/ GST department for conducting Audits.

Development & Maintenance of PME System

The PME division staff Designed and Developed a “Project Management System” to manage the projects in the institute effectively. From time to time, enhancement in the system is also taking place by adding new features. This also increased the transparency in the system. Further, e-PPS (e-Project Proposal System), manpower deployment module, Invoice generation module & Online Challan system have been developed and integrated into it.

Implementation of CSIR automation software

The division has been actively involved in implementing ACCESS/AMS/ CPS software (as per CSIR direction) related to project activities.

Business Development:

Technology Transfer agreements, Technology dissemination, and other related activities of the projects. The division had facilitated Director and other senior scientists making presentations/documents from time to time for various forums and industrial meets. The PME division encourages and assigns to Scientists for secure IP, such as filing patents, trademarks, and copyrights from the project's outcome.

Knowledge Resource Centre

Knowledge Resource Centre

Knowledge Resource Centre, a hub of learning resources, is one of the central facilities working with a mission to provide quality information resources in all forms to the academic and research community of CSIR-CRRI, New Delhi. The Knowledge Resource Centre of CSIR-CRRI plays an important role in advancing the research and academic mission of CSIR-CRRI and in facilitating the creation and dissemination of knowledge. It is a hub of learning resources and one of the central facilities, working with a mission to provide high-quality information resources in all forms to the academic and research community of CSIR-CRRI. With a commitment to excellence, the Knowledge Resource Centre plays a vital role in the acquisition and dissemination of all types of information resources, providing timely and innovative services that support the academic and research needs of the user community. The range and quality of services offered by the Knowledge Resource Centre are comparable to those of any modern library in India and meet international standards.

The Knowledge Resource Centre has developed a well-balanced and up-to-date collection of over 80,000 books, standards, periodicals, conference proceedings, maps, audio/video cassettes, bibliographic databases, etc., containing worldwide information in the field of highway engineering, traffic and transportation engineering, planning & environment, bridge engineering, geotechnical engineering, pavement and related areas. Reading material ranges with respect to the subject area from core science & technology to yoga & meditation and also with a massive collection of 2500+ Hindi Books. The publication also ranges in terms of year of publication from the latest to as old as the 18th century. Apart from the procurement of print books, the library achieved phenomenal progress in the subscription of e-resources through National Knowledge Resources Consortium (NKRC) and individually, which includes more than 100+ e-journals/Magazines, e-conferences, e-standards (Indian Standards on Civil Engineering) to its digital collection and KRC OPAC making 24 x 7 Library in a real sense on the institute-wide network. CRRI KRC is an automated library with an RFID system.



Library Collection at a Glance

The Knowledge Resource Centre has a rich collection of print and electronic resources that support the academic and research needs of the CSIR-CRRI fraternity. The collection includes books, journals, databases, software tools, theses and dissertations, magazines and newspapers, etc. The library supports more than 500 users, including students, research scholars, scientists, and staff.

The total collection of the library as on 31st March 2026 stands as follows:

Collection (Print & Electronic)	Quantity	Collection (Print & Electronic)	Quantity
Books	57230+	Full-Text Databases	03

E-Journals	80+	Plagiarism Detection Tools	01
Maps	688	Writing Assistance Tools	01
Microforms	655	Video Cassettes	122
Institute PhD Theses and Dissertations	70+	Bound Volume of Periodicals	15340+

Knowledge Resource Centre Services & Facilities

❖ Library Membership ❖ RFID-Based Library Circulation ❖ OPAC Search (Online Public Access Catalogue) ❖ Circulation Service (Issue/Return/Renewal/Holds) ❖ Institutional Repository of CRRI ❖ Electronic Current Awareness in Road Transport (E-CART) ❖ Document Delivery Service ❖ Research Support Service	❖ Library Orientation Programme ❖ Reference Service ❖ Fully Airconditioned Reading Area ❖ Wi-Fi (Wireless Fidelity) Facility ❖ Raj Bhasha (Hindi) Collection ❖ Plagiarism Detection Tools ❖ Grammarly, a comprehensive digital writing assistant Tool ❖ Library Awareness Program ❖ QR Code-Based Library Services
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Print and Electronic Resources

The Knowledge Resource Centre has a rich collection of print resources, including books, theses, Journals, and magazines. The bibliographical information of these resources are accessible through the Library Catalogue or OPAC. The institute also has a rich collection of electronic resources, including access to 100+ electronic Journals and databases through the Institute Subscription and the National Knowledge Resources Consortium (NKRC). These e-resources are being subscribed to and renewed annually.

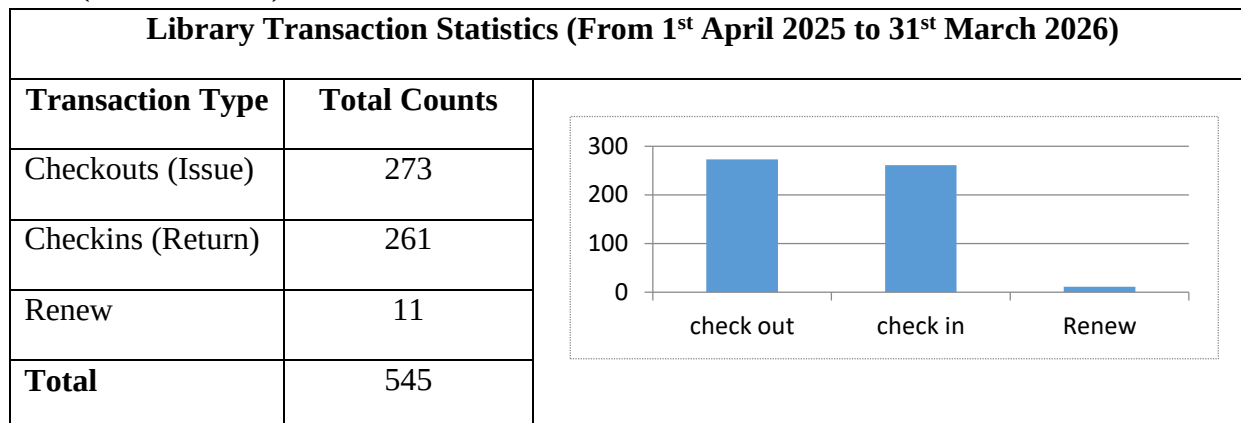
The e-resources subscribed by the Knowledge Resource Centre are as follows:

List of E-Resources (National Knowledge Resources Consortium)

- | | |
|--|---|
| ❖ American Society of Civil Engineers (ASCE) | ❖ ICE Publishing |
| ❖ American Society of Testing and Materials (ASTM) | ❖ IEEE Xplore Digital Library |
| ❖ ASTM International Standards & Engg. Digital Libraries | ❖ Springer Journals |
| ❖ Institution of Civil Engineers (ICE) | ❖ Elsevier Science Direct |
| | ❖ CSIR-NIScPR |
| | ❖ Indian Standards on Civil Engineering |

Library Automation The Knowledge Resource Centre has automated all its housekeeping operations using an open-source integrated library management system software “**Koha**”. It supports the online public access catalogue (OPAC) through which a user can search books, check issued books, renew and

reserve books. Further, it automatically sends all transaction alerts to users, including overdue notices and book due reminders. The transaction statistics of the library from 1st April 2025 to 31st March 2026 is given below (**Source:** Koha).



Out-reach Programmes of the Knowledge Resource Centre



Inauguration of Hindi Book Exhibition by our esteemed DG, Dr. (Mrs.) N. Kalaiselvi



KRC organised various competitions for the children of CRRI staff on the occasion of CSIR Foundation Day



Exhibition of Kamal Book Agency Organised by KRC

Computer Centre & Networking

Computer Centre & Networking (CCN) Division

The Computer Centre and Networking Division (CCN Division) fulfills the overall IT requirements of the Institute by providing comprehensive ICT support and services for various R&D activities, execution of consultancy services, and management of HRD-related functions. The Division is responsible for recommending, formulating, and implementing information technology (IT) strategies, policies, and procedures based on organizational needs. It delivers a wide range of IT services, including LAN and Wi-Fi connectivity, network and information security, development and maintenance of websites and web-based applications for both Internet and Intranet, email services, video conferencing and web meetings, as well as maintenance and upgradation of IT infrastructure.

Scope of Work – IT Strategy, Services, and ICT Infrastructure Management Related Activities.

1. IT Strategy & Policy Formulation : The scope of the CCN Division involves in

- Formulation, review, and implementation of IT strategies aligned with organizational goals.
- Development of IT policies, standard operating procedures (SOPs), and best practices.
- Ensuring compliance with Government of India IT guidelines, cybersecurity frameworks, and regulatory requirements.

2. IT Infrastructure Planning & Management

The Scope of CCN division includes the planning, deployment, and lifecycle management of the Institute's IT infrastructure to ensure reliability, scalability, and optimal performance.

- Planning, procurement support, deployment, and lifecycle management of IT infrastructure.
- Maintenance, upgradation, and performance optimization of servers, storage systems, desktops, laptops, and associated peripherals.
- Capacity planning and resource optimization to ensure efficient utilization and future scalability of IT assets..

3. Network Management (LAN & Wi-Fi)

The CCN Division covers the design, implementation, operation, and maintenance of the Institute's network infrastructure, ensuring seamless, secure, and high-performance connectivity.

- CCN operates connectivity through a fully networked campus with state-of-the-art IT infrastructure, computing and communication resources, providing Scientists and Research Scholars with 24×7 uninterrupted, high-speed, reliable, and secure Wi-Fi Internet access through 53 Access Points, along with 1 Gbps LAN connectivity via NKN, enabling seamless R&D activities.
- The core activities includes : Design, implementation, operation, and maintenance of Local Area Network (LAN) and Wi-Fi infrastructure.
- Regular activities encompass continuous Network monitoring, performance tuning, and troubleshooting to ensure high availability and optimal performance.

- The Division also manages IP address allocation, VLAN configuration, bandwidth optimization, and network access control to ensure efficient and secure network operations.

4. Network & Information Security

Network & Information Security is a key domain area wherein the CCN Division undertakes activities to ensure the protection of organizational IT systems, networks, and data against cyber threats. The major activities include:

- Implementation and management of network security solutions such as firewalls, IDS/IPS, endpoint protection systems, and access control mechanisms.
- Conducting regular vulnerability assessments, security audits, and compliance checks to identify and mitigate risks.
- Incident response management, continuous log monitoring, and proactive mitigation of cybersecurity threats to ensure a secure IT environment.

5. Website & Web Application Services :

The CCN Division encompasses all activities related to the design, development, deployment, and management of websites and web-based applications. The key activities include:

- Design, development, hosting, and maintenance of official websites and web-based applications (Internet and Intranet).
- Ensuring compliance with GIGW (Guidelines for Indian Government Websites) and accessibility standards.
- Content management, performance optimization, and periodic updates.

6. Email & Communication Services

- Management and administration of official email systems.
- Configuration, monitoring, and troubleshooting of email services.
- Implementation of spam filtering, email security, and archival solutions.

7. Video Conferencing & Collaboration Tools

- Deployment, configuration, and maintenance of video conferencing systems and web meeting platforms.
- Technical support for virtual meetings, webinars, and hybrid events.
- Technical Support for livestreaming of events.
- Integration with collaboration tools and enterprise communication systems.

8. IT Support & Helpdesk Services

- Provision of user support through a centralized helpdesk system.
- Troubleshooting hardware, software, and network-related issues.
- Provide Supports for Printers, Antivirus and email related issues
- User training and awareness programs on IT systems and cybersecurity.

9. Scientific Software & R&D Application Support

- Procurement, installation, configuration, and deployment of **MATLAB software suite** along with required toolboxes for scientific research and engineering applications.

- License management, version upgrades, and user support for MATLAB and associated toolboxes.
- Deployment, management, and maintenance of the **Roads India Database** for research, analytics, and data-driven decision-making.
- Integration of scientific software and databases with existing IT infrastructure and research workflows.
- Technical support and training for users on scientific and analytical tools.

10. Monitoring, Reporting & Documentation

- Continuous monitoring of IT systems and services for uptime and performance.
- Preparation of periodic reports on system health, incidents, and service levels.
- Maintenance of technical documentation, inventory records, and configuration details.

11. Cyber Security Management & Awareness

- The CCN Division ensures the security of organizational IT systems, networks, and data by implementing appropriate cybersecurity measures such as antivirus protection, firewalls, intrusion detection and prevention systems, and access control mechanisms.
- Monitoring and prevention of cyber threats including phishing, malware, and unauthorized access, along with ensuring secure authentication and authorization of users.
- Enforcement of IT security policies, conduct of periodic security audits, and strengthening of overall cybersecurity posture.
- Organization of regular cybersecurity awareness programmes and training sessions for users.
- Hosting and maintenance of a dedicated Cyber Security awareness portal on the Intranet: <http://172.16.2.100/cyber-awareness>.
- Dissemination of regular IT security guidelines and threat-handling advisories to all user groups through the Cyber Swachch Kendra email (csk.ccri@csir.res.in), aimed at strengthening cyber hygiene, promoting safe IT practices, and safeguarding institutional IT infrastructure against emerging threats.

12. AEBAS Implementation

- The CCN Division is responsible for the operation, maintenance, and management of Aadhaar Enabled Biometric Attendance System (AEBAS) devices across CRRI.
- Activities include device installation, activation, configuration, and regular maintenance.
- Management of BAS portal operations, including user enrollment, attendance monitoring, and report generation.
- Periodic updating of Registered Device (RD) services and firmware as required.
- Troubleshooting and ensuring seamless functioning of attendance systems in coordination with service providers.

13. RTI Online Management

- The CCN Division acts as the nodal unit for handling RTI-related activities through the RTI Online and CIC RTI portals.
- Management of online RTI applications, appeals, and related digital workflows.

- Implementation and regular updating of Suo-Motu Disclosure on the CRRRI website in compliance with RTI Act provisions.
- Preparation and submission of quarterly RTI reports and annual Transparency Audit reports.
- Providing technical support and coordination for RTI compliance and digital record management.

14. Vendor Coordination & Compliance

- Coordination with OEMs/vendors for procurement, AMC, and support services.
- Monitoring SLA compliance and performance of service providers.
- Evaluation and onboarding of new technologies and solutions.

Other Activities :

Skill Development /Training Programme :

- CCN Division has provided the IT technical support for Five Day training programmes on the Applications for Geosynthetics in
 - National Institute of Technology Goa, 14-18 Apr 2025**
 - VNRVJIET, Hyderabad , 21-25 April 2025**
 - National Institute of Technology Warangal, 16-20 Nov 2025**
 - Odisha University of Technology and Research, , Bhubaneswar 15-19 Dec 2025**
- The CCN Division has organised a training programme on Five-Day Training Programme on MATLAB Product Demonstration & Hands-On Training from 2nd–6th March 2026 and 9th March 2026



Certificate distribution for the course completion of five day training programme on Mat Lab Software

Engineering Services

Table 1 : ईएसडी में के दौरान 26 – 2025पूर्ण कार्यों की सूची
List of Completed Works at ESD (2025-2026)

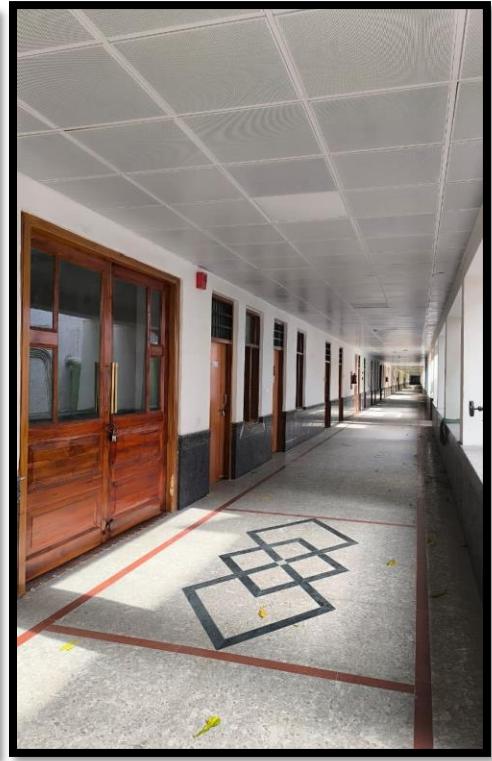
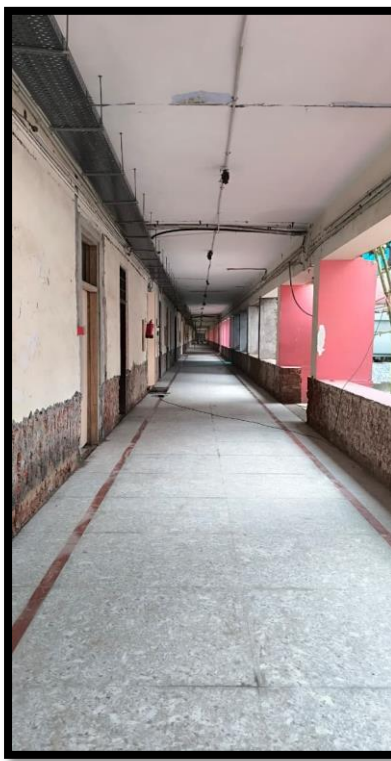
Sl. No.	Name Of Works
1.	Renovation of ground floor Lab corridor at CSIR-CRRI, Mathura Road, New Delhi-110025.
2.	Providing & Controlling the Fogging, larvae, Rodent & Termite etc. at CRRI office & MRSQ Campus, New Delhi - 110025.
3.	Machined Cleaning of Drain lines, Manhole and Old Sewer Well at CRRI Office & MRSQ Campus, New Delhi - 110025.
4.	Management of Solid Waste of Bulk Generation of CRRI Institute Campus and MRSQ Campus through DDSIL.
5.	CAMC of CCTV Camera System at Institute campus of CSIR-CRRI, New Delhi - 110025.
6.	Comprehensive Annual Maintenance Contract for the Passenger Lifts of Administrative Block and Library Building at CSIR-CRRI, New Delhi - 110025.
7.	CAMC of Water Purifier and RO's at CSIR-CRRI, New Delhi - 110025.
8.	Comprehensive Annual Maintenance Contract (CAMC) of DRRI-VRV-AC of DRRI Office PA Room Conference Hall of Director Office at CSIR-CRRI, New Delhi-110025.
9.	Preparation of Working Miniature Model for the Bio Bituminous Road Technology.
10.	Fire Awareness/ Fire Safety Training Program at CSIR-CRRI, New Delhi – 110025.
11.	CSIR – CRRI स्वच्छता पखवाड़ा –2025 (दिनांक -01/05/2025 से 15/05/2025 तकके (दौरान की जाने वाली गतिविधियों के संबंध में।
12.	Swachhata Hi Seva (SHS) Campaign - 2025 Action Plan, (17/09/2025 से 02/10/2025)
13.	Special Campaign 5.0 for improving Swachhata and disposal of pending references from 2nd October - 31st October, 2025.

Table 2 : ईएसडी में के दौरान चल रहे 26 – 2025 कार्यों की सूची
List of Ongoing Works at ESD (2025-2026)

Sl. No.	Name Of Works
1.	Annual Maintenance Work (Civil) for Institute & MRSQ Campus at CRRI, New Delhi - 110025.
2.	Renovation of first floor and second floor Administrative Rooms etc. at CSIR-CRRI, New Delhi – 110025.
3.	Renovation/Refurbishment of TTP Division, Ground Floor at CRRI, New Delhi – 110025.
4.	Renovation/Refurbishment of Ground Floor Flexible Pavement Division at CRRI, New Delhi.
5.	Upgradation of Rain Water Harvesting System at CSIR-CRRI, New Delhi - 110025.
6.	Cleaning, Sanitation and Housekeeping Services for CSIR-CRRI Bldgs. at Office Campus, Mathura Road Staff Quarter and CRRI Staff Colony at Maharani Bagh, New Delhi.
7.	CAMC of CCTV Camera System at Institute campus of CSIR-CRRI, New Delhi - 110025.
8.	Annual Maintenance Contract (AMC) of 380 KVA & 750 KVA DG set (Cummins Make) equipped with Dual Fuel Kit at CSIR-CRRI, New Delhi - 110025.
9.	Comprehensive Annual Maintenance Contract for the Passenger Lifts of Administrative Block and Library Building at CSIR-CRRI, New Delhi - 110025.
10.	AMC of Fire Extinguishers at CSIR-CRRI, New Delhi - 110025.
11.	Comprehensive Annual Maintenance Contract (CAMC) of DRRI-VRV-AC of DRRI Office PA Room Conference Hall of Director Office at CSIR-CRRI, New Delhi-110025.

वर्ष 20252-6 के दौरान ESD से संबन्धित पूर्ण किए गए कार्यों के photographsनिम्नानुसार है।

1. Renovation of ground floor Lab corridor at CSIR-CRRI, Mathura Road, New Delhi-110025 के कार्य की कुछ तस्वीरें ।



2. Providing & Controlling the Fogging, larvae, Rodent & Termite etc. at CRRl office & MRSQ Campus, New Delhi -110025 के कार्य की कुछ तस्वीरें।



3. Machined Cleaning of Drain lines, Manhole and Old Sewer Well at CRRl Office & MRSQ Campus, New Delhi - 110025के कार्य की कुछ तस्वीरें।



4. Management of Solid Waste of Bulk Generation of CRR Institute Campus and MRSQ Campus through DDSIL के कार्य की कुछ तस्वीरें।



**5. CAMC of CCTV Camera System at Institute campus of CSIR-CRRI, New Delhi –
110025 के कार्य की कुछ तस्वीरें।**



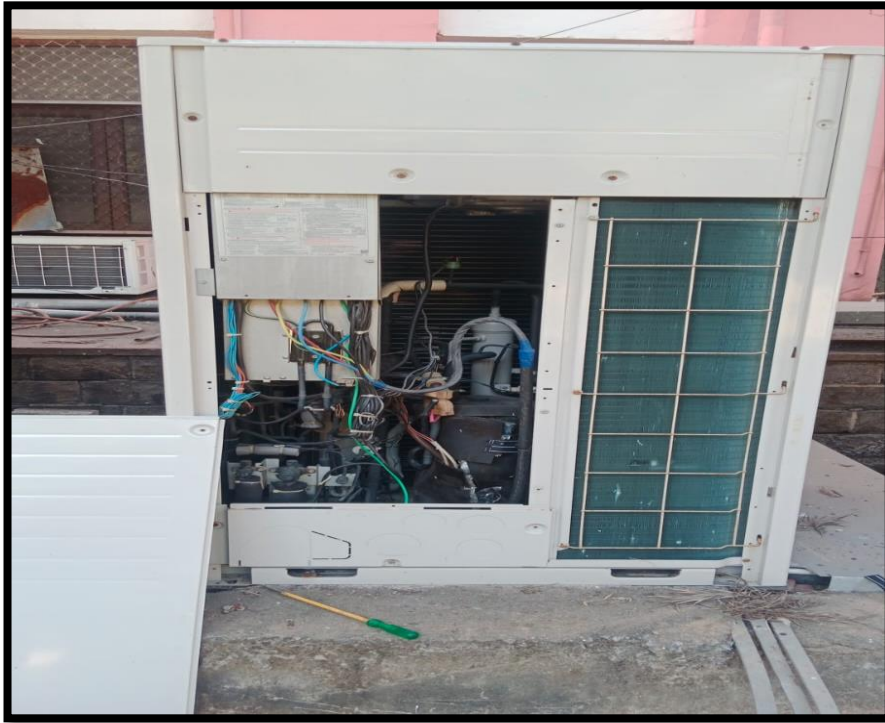
6. Comprehensive Annual Maintenance Contract for the Passenger Lifts of Administrative Block and Library Building at CSIR-CRRI, New Delhi – 110025 के कार्य की कुछ तस्वीरें।



7. CAMC of Water Purifier and RO's at CSIR-CRRI, New Delhi – 110025 के कार्य की कुछ तस्वीरें।



8. **Comprehensive Annual Maintenance Contract (CAMC) of DRRI-VRV-AC of DRRI Office PA Room Conference Hall of Director Office at CSIR-CRRI, New Delhi-110025**
के कार्य की कुछ तस्वीरें।



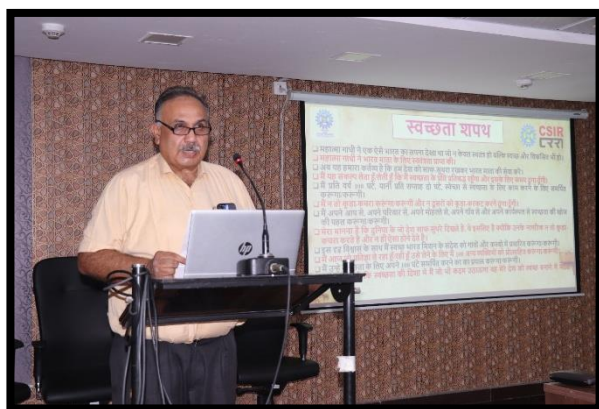
9. **Preparation of Working Miniature Model for the Bio Bituminous Road Technology**
कार्य की कुछ तस्वीरें।



10. Fire Awareness/ Fire Safety Training Program at CSIR-CRRI, New Delhi – 110025 के कार्य की कुछ तस्वीरें।



11. कार्य –“CSIR – CRRRI स्वच्छता पखवाड़ा -2025 (दिनांक -01/05/2025 से 15/05/2025 तक (के दौरान की जाने वाली गतिविधियों के संबंध में।” की कुछ तस्वीरें।



12. Swachhata Hi Seva (SHS) Campaign - 2025 Action Plan, (17/09/2025 से 02/10/2025)के कार्य की कुछ तस्वीरें।



13. Special Campaign 5.0 for improving Swachhata and disposal of pending references from 2nd October - 31st October, 2025 के कार्य की कुछ तस्वीरें।



वर्ष 2025-26 के दौरान ESD से संबंधित चल रहे कार्यों के photographs निम्नानुसार है।

1. Annual Maintenance Work (Civil) for Institute & MRSQ Campus at CRRI, New Delhi – 110025 के कार्य की कुछ तस्वीरें।



**2. Renovation of first floor and second floor Administrative Rooms etc. at CSIR-CRRI,
New Delhi – 110025के कार्य की कुछ तस्वीरें।**



**3. Renovation/Refurbishment of TTP Division, Ground Floor at CRRI, New Delhi –
110025के कार्य की कुछ तस्वीरें।**



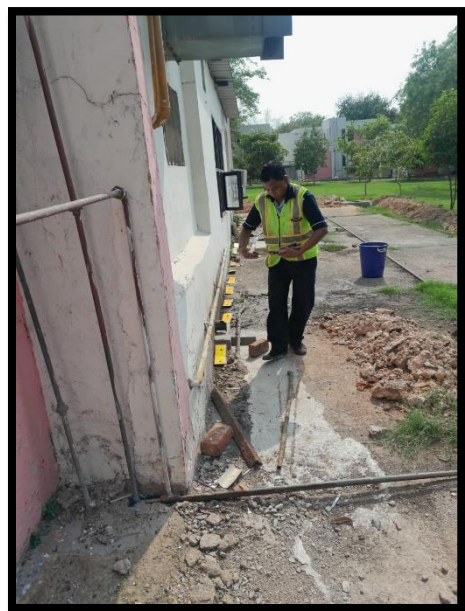
4. Renovation/Refurbishment of Ground Floor Flexible Pavement Division at CRRI, New Delhiके कार्य की कुछ तस्वीरें।



5. Up gradation of Rain Water Harvesting System at CSIR-CRRI, New Delhi – 110025के कार्य की कुछ तस्वीरें।



6. Cleaning, Sanitation and Housekeeping Services for CSIR-CRRI Bldgs. at Office Campus, Mathura Road Staff Quarter and CRRI Staff Colony at Maharani Bagh, New Delhiके कार्य की कुछ तस्वीरें।



7. CAMC of CCTV Camera System at Institute campus of CSIR-CRRI, New Delhi – 110025 के कार्य की कुछ तस्वीरें।



8. Annual Maintenance Contract (AMC) of 380 KVA & 750 KVA DG set (Cummins Make) equipped with Dual Fuel Kit at CSIR-CRRI, New Delhi – 110025 के कार्य की कुछ तस्वीरें।



9. Comprehensive Annual Maintenance Contract for the Passenger Lifts of Administrative Block and Library Building at CSIR-CRRI, New Delhi – 110025 के कार्य की कुछ तस्वीरें।



10.AMC of Fire Extinguishers at CSIR-CRRI, New Delhi – 110025के कार्य की कुछ तस्वीरें।



11.Comprehensive Annual Maintenance Contract (CAMC) of DRRI-VRV-AC of DRRI Office PA Room Conference Hall of Director Office at CSIR-CRRI, New Delhi- 110025के कार्य की कुछ तस्वीरें।



Maharani Bagh Staff Quarters Maintenance

A: Work Completed



Construction of service road along the Yamuna side Boundary wall, i/c Repair/Plastering from the outer side of the Boundary wall and construction of Walkway/ footpath in the jungle area of Campus -II area along with Peripheral of the lawn area i.e. front of Type -C (33-40) quarters at Campus-I of CRRI Staff Colony, Maharani Bagh, New Delhi-110065.



Balance work of Structural Repairs and Renovation/Rehabilitation of the Existing Twelve Storied Multi-storey Building (Phase-I) at CRR I Staff Colony, Maharani Bagh, New Delhi-110065.



Structural Repair/ Rehabilitation of columns beam and Replacement of damaged sunshed of the existing building blocks 32 qtrs in campus II Type II, Type III & Type IV) at CRRI Staff Colony, Maharani Bagh, New Delhi-110065

B: Work in Progress



Repair & Face Lifting of Boundary Wall with Grit Wash at CRR I Staff Colony, Maharani Bagh New Delhi - 110065



Repair/ Rehabilitation of Under Ground Water Tank at CRRl Staff Colony, Maharani Bagh, New Delhi-110065



Providing and laying pipeline network for potable water at CRR I Staff Colony, Maharani Bagh, New Delhi-110065



Supplying, Installation, Testing & Commissioning of New Lift in Phase-I MS Building at CRR I Staff Colony, Maharani Bagh New Delhi - 110065

Mechanical and Transport

Thrust Areas

- Design and development of mechanical equipment required for R&D divisions
- Repair of mechanical equipment
- Transport Management System

Significant Achievements

- Fabrication of Mould for I - Section Beam Casting and Bridge Divider
- Creation and Fabrication of Expansion Joint Testing Facility
- Development of Nuclear Density Gauge mounting device
- Development of LVDT mounting device
- Development of Falling Weight Impact Tester
- Fabrication of Chimney models etc.
- Design & Development of Gym Facility

Major Infrastructural Facilities

- Spot Welding machine
- Lathe machine
- Welding Set (Portable)
- Surface Grinder
- Gas welding set
- Arc Welding Machine
- Power Hack Saw Model HS-20
- Steel Rolling 11”(Metal Press)
- Arbour Press on Coloum Machine
- Circular Saw Cutter Machine



Automatic Drill Machine



Spot Welding Machine Surface Grinder Machine



Open Gym Facility

Quality Management

Quality Management

The Quality Management Division is responsible for ensuring that the IS/ISO 9001:2015 Quality Management System operates effectively and efficiently in the Institute. Adopting higher quality standards in the Institute's operations is also within the Division's mandate. During the year, the division was engaged in conducting internal quality audits, discussing the findings of the audit in the Management Review & Committee meetings, ensuring the Institute's readiness for the external audits to be conducted by certification agency i.e. Bureau of Indian Standards (BIS) for the renewal of the license as per the requirements of IS/ISO 9001: 2015, a higher level of quality standards in the working of the Institute.

Internal Quality Audits (IQA)

Internal Quality Audits are systematic and independent examinations of the system to determine whether the planned arrangements are implemented effectively and are suitable for achieving the objectives. Trained quality auditors of the Institute carried out the audit with the following objective:

- To determine the conformity or non-conformity of the quality system elements with specified requirements.
- To determine the effectiveness of the implemented quality system in meeting the specified quality objectives.
- To provide the auditee with an opportunity to improve the quality system.
- To meet all applicable requirements.
- To ensure the Institute's readiness for Renewal Audit

Internal Quality Audits of the Institute were carried out from 24th -27th February 2025. Auditees were instructed to comply and submit the Action Taken Report of non-conformities and Opportunities for Improvement (OFIs) raised during surveillance audits held on 23rd -24th June, 2025 and The audit findings were discussed in the 37th Management Review Meeting held on 23rd April 2025. **Further** Internal Quality Audits of the Institute were carried out from 03rd - 17th November 2025 to check and ensure whether the IS/ISO 9001:2015 QMS is effectively and efficiently in place in the Institute for Renewal audit to be conducted by certification agency, i.e., Bureau of Indian Standards (BIS). The audit findings were discussed in the 38th Management Review Meeting held on 10th December 2025. Thereafter, the Renewal Audit by the Certification Agency, i.e., BIS, was conducted from 15th -17th December 2025.

Renewal Audit

As the Licence for Quality Management System as per IS/ISO 9001:2015-Licence No. CRO/QMS/L-8001180.6 was valid till 18th December 2025; a Renewal Audit for the Re-Certification of License was required.

Therefore, the Renewal Audit of the Quality Management System was conducted by the Certification Agency, i.e., BIS, from 15th - 17th December 2025 as per the requirements of IS/ISO 9001:2015. Certification Agency, i.e., BIS, submitted a satisfactory audit report and recommended the renewal of the Licence for the Institute with Licence No. CRO/QMS/L-8001180.7. This licence shall be valid from 19th December 2025 to 18th December 2028.



BIS Renewal Audit, 15th -17th December 2025

राजभाषा

सीएसआईआर- केन्द्रीय सड़क अनुसंधान संस्थान में से 2025 अप्रैल 01 के मध्य आयोजित राजभाषा गतिविधियां 2026 मार्च 31

. 1. दिनांक एक शाम राजभाषा और पर्यावरण " को विश्व पर्यावरण दिवस के अवसर पर 2025 जून 05 कार्यक्रम का आयोजन "के नाम

संस्थान में नराकास, द 1-दिल्ली . के सभी सदस्य कार्यालयों के लिए दिनांक को विश्व पर्यावरण 2025 जून 05 दिवस के अवसर पर "एक शाम राजभाषा और पर्यावरण के नाम" कार्यक्रम का आयोजन किया गया।



. 2. माननीय संसदीय राजभाषा समिति की दूसरी उपसमिति द्वारा संस्थान का राजभाषा विषयक निरीक्षण (2025/06/25 दिनांक)

दिनांक को 2025/06/25 माननीय संसदीय राजभाषा समिति की दूसरी उपसमिति द्वारा संस्थान का राजभाषा विषयक निरीक्षण किया गया। इस निरीक्षण में संस्थान उत्तीर्ण रहा।



. 3 संस्थान की राजभाषा कार्यान्वयन समिति की 122वीं बैठक

(2025/06/30 दिनांक)

दिनांक 2025/06/30 को निदेशक महोदय की अध्यक्षता में संस्थान की राजभाषा कार्यान्वयन समिति (राकास) 122 की बैठक का आयोजन किया गया। बैठक में संस्थान में हिन्दी के प्रगामी प्रयोग पर चर्चा की गई। बैठक का कार्यवृत्त सभी सदस्यों को जारी किया गया। बैठक में राजभाषा कार्यान्वयन समिति के प्रतिनिधियों ने /सदस्यों 16 प्रतिभागिता की।

. 4 हिन्दी कार्यशाला (2025/08/25 दिनांक)

दिनांक "जीओवी ड्राइव" , "मेल डॉट जीओवी डॉट इन" को संस्थान के काउंसिल हॉल में 2025/08/25 'कंठस्थ' तथा अनुवाद टूल विषय पर एक हिन्दी कार्यशाला का आयोजन किया गया। इस कार्यशाला में संस्थान के कार्मिकों ने प्रतिभागिता की। 33 कार्यशाला की अध्यक्षता श्री संतोष कुमार प्रशासनिक अधिकारी द्वारा की , कनिष्ठ हिन्दी अनुवादक द्वारा कार्यशाला का , हिन्दी अधिकारी तथा श्री शशांक भटनागर , गई। श्री संजय चौधरी संचालन किया गया।



5. हिन्दी पखवाड़ा (दिनांक 15 सितंबर से 30 सितंबर 2025 तक)

• हिन्दी पखवाड़ा (2025/09/15 दिनांक) उद्घाटन समारोह 2025

श्रीमती विजय लक्ष्मी सीएसआईआर मुख्यालय द्वारा सरकारी कार्यालयों में राजभाषा हिन्दी के , हिन्दी अधिकारी , कार्मिकों ने भाग लिया। 74 प्रगामी प्रयोग से संबंधित व्याख्यान दिया गया। इस व्याख्यान में संस्थान के



• हिन्दी सामान्य ज्ञान प्रतियोगिता (2025/09/16 दिनांक)

दिनांक को संस्थान के न्यू ट्रेनिंग हॉल में हिन्दी सामान्य ज्ञान प्रतियोगिता का आयोजन किया गया। 2025/09/16 कार्मिकों ने भाग लिया। इस प्रतियोगिता के विजेता निम्नलिख 57 इस प्रतियोगिता में संस्थान के हैं -:

1. ज्योति यादव, तकनीशियन - प्रथम स्थान
2. मनोज स्वरूप शुक्ला, अनुभाग अधिकारी - द्वितीय स्थान
3. अभिजीत, तकनीशियन - तृतीय स्थान
4. रुक्सा, सहायक अनुभाग अधिकारी - प्रोत्साहन पुरस्कार



• हिन्दी प्रभागीय/अनुभागीय प्रस्तुतीकरण प्रतियोगिता (दिनांक 22/09/2025)

दिनांक 22/09/2025 को संस्थान के सभागार में हिन्दी प्रभागीय/अनुभागीय प्रस्तुतीकरण प्रतियोगिता का आयोजन किया गया। इस प्रतियोगिता में संस्थान के 3 प्रभागों ने प्रतिभागिता की। प्रतियोगिता के निर्णायक डॉ. विनोद करार, मुख्य वैज्ञानिक थे। प्रतियोगिता का परिणाम निम्नलिखित है :-

- | | |
|--|-----------------|
| 1. पीईडी प्रभाग (विधि व्यास, वरिष्ठ वैज्ञानिक द्वारा प्रस्तुतीकरण) | - प्रथम स्थान |
| 2. पीएमई प्रभाग (रविंदर दीकोंडा, एसटीओ 3 द्वारा प्रस्तुतीकरण) | - द्वितीय स्थान |
| 3. ईएसडी प्रभाग (ओम प्रकाश यादव, एसटीओ 3 द्वारा प्रस्तुतीकरण) | - तृतीय स्थान |



• हिन्दी अनुवाद प्रतियोगिता (2025/09/23 दिनांक)

दिनांक 2025/09/23 को संस्थान के सभागार में हिन्दी अनुवाद प्रतियोगिता का आयोजन किया गया। इस प्रतियोगिता में संस्थान के - : कार्मिकों ने प्रतिभागिता की। प्रतियोगिता का परिणाम निम्नलिखित है 40

- | | |
|-----------------------|-----------------------|
| 1. मनोज स्वरूप शुक्ला | - प्रथम स्थान |
| 2. निधि गौतम | - द्वितीय स्थान |
| 3. निमिष मिश्रा | - तृतीय स्थान |
| 4. रविंदर दीकोंडा | - प्रोत्साहन पुरस्कार |



• हिन्दी तकनीकी शोधपत्र प्रतियोगिता

संस्थान में वैज्ञानिक तथा तकनीकी स्टाफ के लिए हिन्दी तकनीकी शोधपत्र प्रतियोगिता का आयोजन किया गया। हिन्दी तकनीकी शोधपत्र की प्रविष्टियाँ जमा करने की निर्धारित अंतिम तिथि दिनांक 23/09/2025 तक राजभाषा अनुभाग को 5 तकनीकी लेख प्राप्त हुए। इन तकनीकी लेखों का मूल्यांकन निदेशक महोदय द्वारा नामित बाहरी निर्णायकों द्वारा किया गया। प्रतियोगिता का परिणाम निम्नलिखित है: -

1. विधि व्यास, वरिष्ठ वैज्ञानिक एवं डॉ. प्रदीप कुमार, मुख्य वैज्ञानिक - प्रथम पुरस्कार
2. शंख दास, वरिष्ठ तकनीकी अधिकारी (3); डॉ. अंबिका बहल, वरिष्ठ प्रधान वैज्ञानिक; डॉ. राजीव कुमार, वरिष्ठ वैज्ञानिक - द्वितीय पुरस्कार
3. सतीश पांडेय, वरिष्ठ प्रधान वैज्ञानिक, शंख दास, वरिष्ठ तकनीकी अधिकारी (3) - तृतीय पुरस्कार
4. रोहित गौतम, तकनीशियन; डॉ. संपथ कुमार, प्रधान वैज्ञानिक; डॉ प्रदीप कुमार, मुख्य वैज्ञानिक - प्रोत्साहन पुरस्कार

• प्रशासनिक हिन्दी कार्यशाला (दिनांक 24/09/2025)

दिनांक 24/09/2025 को संस्थान के सभागार में हिन्दी प्रशासनिक कार्यशाला का आयोजन किया गया। कार्यशाला में मुख्य वक्ता संस्थान के प्रशासनिक अधिकारी श्री संतोष कुमार थे। प्रशासनिक कार्यशाला में संस्थान के 72 कार्मिक उपस्थित थे। कार्यशाला में वक्ता द्वारा भारत सरकार की राजभाषा नीति तथा राजभाषा संबंधी विभिन्न नियम तथा उपनियमों के विषय में जानकारी दी गई।



• हिन्दी पखवाड़ा समापन एवं पुरस्कार वितरण समारोह 2025

दिनांक समापन एवं पुरस्कार वितरण समारोह 2025 को संस्थान के सभागार में हिन्दी पखवाड़ा 2025 सितंबर 30 का आयोजन किया गया। इस समारोह में संस्थान के निदेशक प्रोमनोरंजन परिड़ा द्वारा हिन्दी पखवाड़ा के दौरान हिन्दी प्रतियोगिताओं के पुरस्कार विजेताओं को प्रमाणपत्र प्रदान किए गए। समारोह में निदेशक 4 आयोजित सि . साथ वरिष्ठ प्रशासन नियंत्रक श्रीमती बीना ए-महोदय के साथकेरा तथा प्रशासनिक अधिकारी श्री संतोष कुमार की गरिमामयी उपस्थिति रही। समारोह में पुरस्कार विजेताओं सहित कुल कार्मिकों ने प्रतिभागिता की। समारोह 72 में श्री संतोष कुमार, प्रशासनिक अधिकारी द्वारा तैयार की गई पीपीटी का प्रस्तुतीकरण किया गया जिसमें पखवाड़े के दौरान आयोजित आमंत्रित व्याख्यान, प्रशासनिक कार्यशाला तथा हिन्दी प्रतियोगिताओं के विषय में जानकारी दी गई। निदेशक महोदय ने हिन्दी पखवाड़ा को सफल बनाने के लिए संस्थान के कार्मिकों की प्रशंसा की। 2025 सिकेरा द्वारा धन . वरिष्ठ प्रशासन नियंत्रक श्रीमती बीना ए्यवाद ज्ञापन दिया गया।



.6संस्थान की राजभाषा कार्यान्वयन समिति की 123वीं बैठक
) दिनांक (2025/10/24

दिनांक (राकास) को निदेशक महोदय की अध्यक्षता में संस्थान की राजभाषा कार्यान्वयन समिति 2025/10/24 123वीं बैठक का आयोजन किया गया। बैठक में संस्थान में हिन्दी के प्रगामी प्रयोग पर चर्चा की गई। बैठक का कार्यवृत्त सभी सदस्यों को जारी किया गया। बैठक में राजभाषा कार्यान्वयन समिति के प्रतिनिधियों ने /सदस्यों 23 प्रतिभागिता की।

. 7 संस्थान की राजभाषा कार्यान्वयन समिति की 124वीं बैठक

(2025/12/29 दिनांक)

दिनांक (राकास) को निदेशक महोदय की अध्यक्षता में संस्थान की राजभाषा कार्यान्वयन समिति 2025/12/29 124वीं बैठक का आयोजन किया गया। बैठक में संस्थान में हिन्दी के प्रगामी प्रयोग पर चर्चा की गई। बैठक का कार्यवृत्त सभी सदस्यों को जारी किया गया। बैठक में राजभाषा कार्यान्वयन समिति के प्रतिनिधियों ने /सदस्यों 24 प्रतिभागिता की।

8. सीएसआईआर-केंद्रीय सड़क अनुसंधान संस्थान में दिनांक 13 जनवरी 2026 को 'विश्व हिंदी दिवस समारोह- 2026' का आयोजन

सीएसआईआर-केंद्रीय सड़क अनुसंधान संस्थान में दिनांक 13 जनवरी 2026 को 'विश्व हिंदी दिवस समारोह- 2026' का गरिमामय आयोजन किया गया। इस अवसर पर डॉ. राकेश बी. दुबे मुख्य अतिथि थे। इंग्लैंड में भारतीय दूतावास में सांस्कृतिक सलाहकार के रूप में अपनी सेवाएं दे चुके डॉ. राकेश बी. दुबे जी वर्तमान में भारतीय गुणवत्ता परिषद् में कार्यरत हैं। मुख्य अतिथि डॉ. दुबे ने "हिन्दी: देश में, विदेश में" विषय पर पीपीटी के माध्यम से अपने प्रेरक विचार साझा किए। समारोह के दौरान संस्थान की गृह पत्रिका 'सड़क दर्पण' (अंक 29) का विमोचन भी संपन्न हुआ।

विश्व हिंदी दिवस के उपलक्ष्य में केंद्रीय सड़क अनुसंधान संस्थान में दिनांक 8 जनवरी 2026 को हिंदी ज्ञान प्रतियोगिता और दिनांक 13 जनवरी 2026 को हिंदी काव्य पाठ प्रतियोगिता का आयोजन किया गया।

'विश्व हिंदी दिवस समारोह- 2026' के दौरान दोनों हिंदी प्रतियोगिता के विजेताओं को पुरस्कृत किया गया। इस समारोह में नराकास, दक्षिण दिल्ली 1 के अनेक कार्यालय के प्रतिभागियों ने भाग लिया। कार्यक्रम के अंत में नराकास के सभी प्रतिभागियों को सहभागिता प्रमाणपत्र का वितरण किया गया। कार्यक्रम का संचालन राजभाषा सलाहकार संजय चौधरी ने किया।



9. अंतर्राष्ट्रीय मातृभाषा दिवस के उपलक्ष्य में दिनांक 24 फरवरी 2026 को हिंदी कार्यशाला का आयोजन

संस्थान में अंतर्राष्ट्रीय मातृभाषा दिवस के उपलक्ष्य में दिनांक 24 फरवरी 2026 को हिंदी कार्यशाला का आयोजन किया गया। कार्यशाला में व्याख्यान देने के लिए एआई विशेषज्ञ डॉ. प्रियंका जैन को आमंत्रित किया गया। डॉ. प्रियंका जैन वर्तमान में भारत सरकार के इलेक्ट्रॉनिक्स और सूचना प्रौद्योगिकी मंत्रालय के अंतर्गत सेंटर फॉर डेवलपमेंट ऑफ एडवांस्ड कम्प्यूटिंग (C-DAC) में साइंटिस्ट 'एफ' (एसोसिएट डायरेक्टर) के पद पर कार्यरत हैं। कार्यशाला के पहले सत्र में 'भाषा प्रौद्योगिकी और सार्वभौम कृत्रिम बुद्धिमत्ता (AI)' विषय पर व्याख्यान दिया गया।

कार्यशाला के दूसरे सत्र में 'हिन्दी भाषा में शोधपत्र लेखन - चुनौतियाँ, जेनरेटिव एआई (GenAI) टूल्स और नैतिकता' विषय पर व्याख्यान दिया गया।

कार्यशाला के अंत में परिचर्चा सत्र का आयोजन किया गया जिसमें प्रतिभागियों की शंकाओं / प्रश्नों का यथासंभव निवारण किया गया। कार्यशाला में संस्थान के 87 वैज्ञानिकों/कार्मिकों ने प्रतिभागिता की।



125वीं बैठक संस्थान की राजभाषा कार्यान्वयन समिति की .10 **(2026/03/27 दिनांक)**

दिनांक 2026/03/27 को संस्थान की राजभाषा कार्यान्वयन समिति 125वीं बैठक का आयोजन की (राकास) किया गया। बैठक में संस्थान में हिन्दी के प्रगामी प्रयोग पर चर्चा की गई। बैठक में राजभाषा कार्यान्वयन समिति के प्रतिनिधियों ने प्रतिभागिता की।/सदस्यों 22

Administration

CSIR-CRRI Research activities are fully supported by dedicated staffs in the administration. It has different arms to assist its day-to-day functioning such as DRRI Secretariat, Controller of Administration, Personal Cell, Vigilance, Establishment-I, Establishment-II, Finance &Accounts andStores &Purchase Sections. They maintain personal files, service books and Annual Confidential Report folders of around 250 staff members. They deal with allotment of staff quarters & scientist apartments, matters pertaining to estates, leaves, deputation/foreign services, pension, medical reimbursement etc. They deal with parliamentary questions and other related matters. These departments are also dealing with all administrative matters including their appointment, promotion, transfer, posting, deputation, and disciplinary issues, apart from other service matters that may come up from time to time. This division has the following sub-divisions.

- **DRRI SECRETARIAT**
- **COA's Office**
- **AO's OFFICE**
- **PERSONNEL CELL**
- **VIGILANCE CELL**
- **ESTABLISHMENT-I**
- **ESTABLISHMENT-II**
- **GENERAL & WORKS**
- **SECURITY**
- **GUEST HOUSE (WING I & II)**
- **CANTEEN**
- **FINANCE & ACCOUNTS SECTION**
- **STORES & PURCHASE SECTION**
- **RAJBASHA**
- **RIGHT TO INFORMATION CELL**
- **CRRI STAFF CLUB**
- **CRECHE**
- **INTERNAL COMPALAINTS COMMITTEE**

General Information

Important Days Celebrations

National Intellectual Property Festival 2025

CSIR-CRRI celebrated the National Intellectual Property Festival 2025 (Rashtriya Boudhik Sampada Mahotsav), an awareness programme on Intellectual Property for school students, under the JIGYASA 2.0 on 28-04-2025. As part of the celebration, distinguished scientists of the Institute delivered lectures on Intellectual Property, and a quiz competition was organized for the school students. The programme was graced by Dr. Yogesh N. Dhoble, Chief Scientist, CSIR-IPU, CSIR, New Delhi, as the Chief Guest and Mr. Saroj Kumar, Joint Controller, Delhi Patent Office, New Delhi, as the Guest of Honor. Dr. Yogesh N. Dhoble delivered the IP Festival Lecture on “*Intellectual Property and the way forward*” while Mr. Saroj Kumar delivered a lecture on “Patenting System in India-Registration Process”.



AcSIR Foundation Day 2025

CSIR-CRRI celebrated AcSIR Foundation Day on April 03, 2025. As part of the celebration, various events were organized by the Science Club of CRRI. The events were attended by the faculty, Scholars, and Interns. A Documentary on ACSIR journey at CRRI was also released by the Chief Guest, Prof. Nirendra Dev, Delhi Technology University, and Special Guest, Prof. Manoranjan Parida, Director, CSIR-CRRI.



Swachhta Pakhwada 2025

As part of Swachh Bharat mission of Govt. of India, CSIR-CRRI celebrated Swachhta Pakhwada 2025 during May 01 to May 15, 2025. The action plans of the mission were successfully carried out by the scientists and staff members of CRRI, and the goals were achieved enthusiastically. A Swachhta pledge was taken by the staff members of the institute on May 01, 2025. During the Swachh Bharat Pakhwada, cleanliness drives in all the divisions / sections including canteen, guest house, hostel, garden, library, toilets, stores, residential colonies etc. were accomplished, including weeding out of old files as per the record retention schedule. Besides these, cleanliness drives were also carried out outside the Institute in areas near India Gate on May 05, 2025 and Yamuna Ghat on May 08, 2025. Further, essay, and quiz competitions were organized for the staff members and their wards to bring about the importance and relevance of "Swachh Bharat Mission" in India. Furthermore, promotion of the Swachh messages through website, banners, posters, and hoardings were completed. Furthermore, an expert lecture on "Swachh Bharat, Vikshit Bharat" was delivered by Sh. Prempal Sharma, Joint Secretary (Retd.), Railway Board, Ministry of Railways, Govt. of India in the Institute on May 02, 2025.



International Yoga Day-2025

CSIR-CRRI celebrated the International Yoga Day 2025 on Saturday, June 21, as it marks the summer solstice, the longest day of the year in the Northern Hemisphere — symbolizing light, energy, and balance, values deeply rooted in yogic philosophy. The official theme for year 2025 is “Yoga for One Earth, One Health.”



74th CSIR-CRRI Foundation Day

CSIR-CRRI celebrated its 74th Foundation Day on July 16, 2025. As part of the celebration, various events such as Hindi essay competition, Football matches, Signing of agreement/technology transfer to the Industry and Inauguration of Hindi book exhibition and various facilities in CSIR-CRRI Staff colony by Dr.(Mrs.) N. Kalaiselvi, DG-CSIR & Secretary DSIR, were organized. Further, Prof. P.K. Sikdar, Former Professor, IIT Bombay, Former Director CSIR-CRRI, and Advisor to the International Road Federation (IRF) graced the occasion in the first half as Chief guest and delivered an insightful lecture on "Road Safety in India". Furthermore, Dr.(Mrs.)N. Kalaiselvi, DG-CSIR & Secretary DSIR, and Sh. Sanjay Kumar, Former Secretary, Ministry of Steel, Govt. of India, graced the occasion in the second half as Chief Guest and Guest of Honor respectively.

79th India Independence Day

CSIR-CRRI celebrated India's 79th Independence Day on August 15, 2025. As part of the celebration, a National flag hosting was done by Dr. S. Velmurugan, Chief Scientist, CSIR-CRRI at CSIR-CRRI Office lawn while another National flag hosting was done by Prof. Manoranjan Parida, Director, CSIR-CRRI at CSIR-CRRI Staff Quarter's lawn, in the presence of staff members and their families. Further, various cultural programs, games and fun activities were organized for the staff members and their children.



84th CSIR Foundation Day

CSIR-CRRI celebrated 84th CSIR Foundation Day on September 29, 2025. As part of the celebration, students from some schools in Delhi were invited for an interaction session with the scientists / technical officers of the Institute. Shri Amit Kumar Shukla, Joint Secretary, MoRD & Director General, NRIDA, Govt. of India, graced the occasion as Chief Guest and delivered the foundation day lecture. The lecture was attended by staff members, retired staff members, and officials from Industry partners. Further, a new movie on CSIR-CRRI was also released by Prof. Manoranjan Parida, Director, CSIR-CRRI.



CSIR-CRRI celebrated “Special Campaign 5.0 for Swachhata and disposal of pending matters in Govt. Offices”

CSIR-CRRI celebrated “Special Campaign 5.0 for Swachhata and disposal of pending matters in Govt. Offices”, during October 02-31, 2025. During the period, various activities/cleanliness drives led by Prof. Manoranjan Parida, Director, CSIR-CRRI were carried out in the Institute. Besides, a Swachhata Pledge was administered to all the staff members of the Institute by the Director on October 03, 2025.



Observance of Rashtriya Ekta Diwas (National Unity Day)

CSIR-CRRI observed Rashtriya Ekta Diwas (National Unity Day) on 31st October, 2025. It commemorates the birth anniversary of Sardar Vallabhbhai Patel, the architect of national integration of independent India. It is a special occasion to foster and reinforce our dedication to preserve and strengthen the unity, integrity and security of our nation. As part of the observance, Rashtriya Ekta Diwas pledge was taken by staff members of the Institute.

CSIR-CRRI celebrated India International Science Festival (IISF)-2025 Curtain Raiser

CSIR-CRRI celebrated IISF-2025 Curtain Raiser Outreach Event at CSIR-CRRI on November 28, 2025 under the theme of "Vigyan se Samruddhi: For Atma Nirbhar Bharat," emphasizing the role of science in achieving self-reliance and national prosperity. The event was graced by Dr. Ranjana Agarwal, Outstanding Scientist, CSIR and Former Director, CSIR-NIScPR & CSIR-CRRI, New Delhi in the presence of Prof. Manoranjan Parida, Director, CSIR-CRRI. As part of this celebration, various events were organized for the students under the Jigyasa programme.



CSIR-CRRI celebrated “5th Janjatiya Gaurav Divas(JJGD)-2025”

In commemoration of 150th birth anniversary of Bhagwan Birsa Munda, CSIR-CRRI celebrated the 5th Janjatiya Gaurav Divas from November 15 to November 28, 2025. As part of this celebration, various activities such as poster, quiz competitions and interactive events were organized for the students, staff members and their wards. The closing event of the programme was organised on November 28, 2024, and the event was graced by Dr. Vincent Ekka, Assistant Professor, Indian Social Institute, New Delhi as Chief Guest. A lecture highlighting the importance of celebrating the Janjatiya Gaurav Divas and the life of Bhagwan Birsa Munda was delivered by the Chief Guest.

76th Constitution Day (Samvidhan Divas) 2025

CSIR-CRRI observed 76th Constitution Day of India on November 26, 2025. This day marks the adoption of the Indian Constitution in 1949 and is observed annually to honor the fundamental principles that guide the nation. As part of the observation, the Preamble of Indian Constitution is read out by the staff members of the Institute along with Prof. Manoranjan Parida, Director, CSIR-CRRI.



Vigilance Awareness Week 2025

CSIR-CRRI observed Vigilance Awareness Week 2025 from October 27 to November 02, 2025 with the theme "Vigilance: Our Shared Responsibility." Vigilance Awareness Week is an initiative by the Central Vigilance Commission (CVC) aimed at promoting integrity, transparency, and accountability in public administration and combating corruption. As part of the celebration, various events such as awareness lectures and quizzes, drawing and poster competitions were organized for staff members and their wards. Besides, an integrity pledge was taken by the staff members of the Institute on October 27, 2025. Further, events like Nukkad Nattak and Musical performances related to vigilance awareness were also organized during the period.



37th Road Safety Week / Month-2026

CSIR-CRRI observed 37th Road Safety Week / Month-2026 during January 01, 2026 to January 31, 2026 with the theme "Sadak Suraksha Jeevan Raksha" (Road Safety, Life Safety) to promote awareness about road safety across India. As part of the observation, various events such as Solemn Pledge, Lively Nukkad Natak, HMSI Training and Student Quiz were also organised.



International Mother Language Day 2026

CSIR-CRRI celebrated International Mother Language Day on February 24, 2026 to promote linguistic and cultural diversity across the world. The day highlights the importance of preserving mother languages and encouraging multilingual education for inclusive and sustainable societies. As part of this celebration, a 1-day Hindi workshop and training program was organised. The program was graced by Dr. Priyanka Jain, Associate Director, C-DAC, Delhi, as the Chief Guest in the presence of Dr. Ch. Ravi Sekhar, Director, CSIR-CRRI. Dr. Jain delivered a lecture on applications of AI, GenAI and Behavioural AI in Hindi language processing.



International Women's Day 2026

CSIR-CRRI celebrated International Women's Day on March 13, 2026. As part of the celebration, Sh. Soumya Bhaumik, Advocate, Supreme Court, the Chief Guest delivered a lecture on the Prevention of Sexual Harassment (POSH) at Workplace.



National Science Day 2026

CSIR-CRRI celebrated National Science Day 2026 on March 11, 2026 with the theme “CSIR-CRRI Road Technologies Transforming Waste to Green Infrastructure”. The event was graced by the Chief Guest, Dr. Arvind Bodhankar, Chief Sustainability Officer, AM/NS India along with Dr N. Kalaiselvi, DG, CSIR and Dr. Ch.Ravi Sekhar, Director, CSIR-CRRI



Workshops/ Conferences/ Seminars Organised

Conference on Future of Structural Health Monitoring for Sustainable Infrastructure

CSIR-CRRI & Delhi Technological University (DTU), Delhi jointly organized a conference on “Future of Structural Health Monitoring for Sustainable Infrastructure” on April 01, 2025 at DTU, Delhi.



International Conference on Bitumen Emulsion (ICBE)-2025

The Central Road Research Institute (CSIR-CRRI), in collaboration with Nouryon and the PHD Chamber of Commerce and Industry, organised the International Conference on Bitumen Emulsion ICBE), on June 18, 2025, at Le Meridien, Delhi, India. This esteemed event marked a significant milestone in the pursuit of sustainable infrastructure solutions, bringing together leaders from three distinguished organizations. As part of the conference, CSIR-CRRI organized a technical exhibition and showcased some of the major projects undertaken / achievements in the field of road transport and highways.

11th International Conference on Transportation Systems Engineering and Management (CTSEM-2025)

The Central Road Research Institute (CSIR-CRRI), in collaboration with MANIT, Bhopal, organised the 11th International Conference on Transportation Systems Engineering and Management (CTSEM-2025) in Bhopal, India. As part of the conference, a technical exhibition was also organised for various stakeholders, and CSIR-CRRI participated in the expo by showcasing some of its significant projects and achievements in the field of road transport and highways.

One Day as a Scientist

CSIR-CRRI conducted “One Day as A Scientist” for the school students during July 21-25, 2025. “One Day as A Scientist” is an inspiring initiative of the Hon’ble Prime Minister and President, CSIR Narendra

Modi that encourages young students to immerse themselves in the scientific community by spending a day at research laboratories, planetariums, space centres, or similar facilities, fostering a hands-on experience in the field of science. As part of the programme, 540 students from various schools visited the Institute during July 21-25, 2025 and interacted with the scientists.



Workshop on Bridge Deck Waterproofing Systems for Highway Structures

CSIR-CRRI organized 1-day workshop on ‘Bridge Deck Waterproofing Systems for Highway Structures’ on August 26, 2025. The workshop was graced by Shri Rahul Gupta, Secretary General, Indian Roads Congress, MoRTH, Gov. of India.

8th Dr. P. Raychaudhuri Memorial Lecture

CSIR-CRRI started the “Dr. P. Raychaudhuri Memorial Lecture Series” in 2018 in the honor of Late Dr. P. Raychaudhuri, the First Head of Bridge Division, CSIR-CRRI, for his significant professional contributions to the Nation. The 8th Lecture of the Series was organized on August 26, 2025, and Prof. Prem Krishna, Professor (Retd.), IIT Roorkee, Uttarakhand, graced the occasion as Chief Guest and delivered the lecture on “Development in Bridge Engineering-Growth & Challenges”. Prof. Manoranjan Parida, Director, CSIR-CRRI, felicitated Prof. Prem Krishna and the family members of Dr. P. Raychaudhuri.



Free Health Camp

Under Swasth Nari initiative of the MoHFW, Govt. of India, CSIR-CRRI, in collaboration with All India Institute of Ayurveda (AIIA), New Delhi organised a lecture on “Mother and Child Care” and free health camp on October 01, 2025. The lecture was delivered by Prof. Ved Prakash Vyas, Deptt. of Balroaga, AIIA, new Delhi.



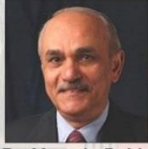
5th Edition of Prof. B.B. Pandey Memorial Lecture

CSIR-CRRI & MoRTH, Govt. of India jointly organized the 5th Edition of Prof. B.B. Pandey Memorial Lecture on October 15, 2025. Around 250 participants attended from various organizations.

Prof. B. B. Pandey Memorial Lecture (5th Edition)


Prof. B. B. Pandey
1940-2018

Honourable Speakers & Presentation Topics


Dr. Hussain Bahia
Emeritus Professor, University of Wisconsin Madison USA & Specialist Consultant Bitcol Elrich India


Dr. Richard Yeo
Chief Operating Officer NTRO (ARRB)

Quality of Bitumen & Modified Bitumen
Next Generation In-Service Pavement Evaluation

Date and Time: 15th October 2025 (03:00 PM to 05:00 PM)

Organized By

Dr. G. Bharath
Principal Scientist
CSIR-CRRI

Sh. Bidur Kant Jha
Director (New Technology)
MoRTH

No Registration Fee
Joining link & QR code
<https://tinyurl.com/4nrbx766>



Conference on "Transportation Research Efforts for Ecological Sustainability-TREES2025"

CSIR-CRRI & VNR Vignana Jyothi Institute of Engineering and Technology (VNR VJIET), Hyderabad jointly organized a conference on "Transportation Research Efforts for Ecological Sustainability-TREES2025" during October 24-25, 2025 at VNR VJIET, Hyderabad.



1-day Seminar on “Standardization of Bituminous Binder for Highway Infrastructure Development”

CSIR-CRRI and Bureau of Indian Standards (BIS), Delhi jointly organized a seminar on “Standardization of Bituminous Binder for Highway Infrastructure Development” on November 24, 2025 at CSIR-CRRI, New Delhi



2-day Conference on “Recent Developments on Traffic Noise Modelling & Mitigation for Urban Area Heterogeneous Road Traffic”

The conference on “Recent Developments in Traffic Noise Modelling & Mitigation for Urban Area Heterogeneous Road Traffic” was successfully held on November 21–22, 2025, at the CSIR–Central Road Research Institute (CRRI), New Delhi. Organized under the leadership of Prof. Manoranjan Parida, with

Dr. Nasim Akhtar and Dr. Mukti Advani playing key coordinating roles, the event brought together experts from academia, research institutions, and policy domains to address the growing challenge of urban noise pollution .

The conference focused on the increasing intensity of traffic-related noise in urban environments and its significant impact on human health and well-being. Participants engaged in discussions on advanced noise mapping techniques, predictive modelling, exposure assessment, and innovative mitigation strategies. The deliberations emphasized the importance of data-driven approaches and modern technologies in understanding and managing complex urban soundscapes .

Key contributions were made by leading institutions. CSIR-CRRI showcased its work in noise assessment, prediction, and mitigation, along with its role in developing national standards and guidelines. IIT (BHU), in collaboration with IIT Roorkee, presented pioneering research on traffic noise propagation and mitigation modelling, including the establishment of a Traffic Noise Research Laboratory under the IMPRINT India programme. Delhi Technological University highlighted its research in environmental noise, particularly in road and railway contexts, using innovative mapping and modelling techniques. CSIR-NPL contributed insights into measurement standards and acoustic testing, supported by advanced facilities such as reverberation and anechoic chambers .

Overall, the conference served as a vital platform for knowledge exchange and collaboration, reinforcing the need for integrated scientific, technological, and policy-driven solutions. It concluded with a shared vision of developing quieter, healthier, and more sustainable urban environments.



135th CSIR-CRRI Research Council Meeting

135th Research Council Meeting of CSIR-CRRI was organized during November 25-26, 2025. Prof. Manoranjan Parida, Director, CSIR-CRRI welcomed Prof. Mahesh Tandon, Research Council, Chairman, Tandon Consultants Pvt. Ltd. and all other members of the research council. Various presentations were made by scientists of the Institute during the meeting.



2-Day National Workshop on Carbon Footprint and Sustainability Evaluation for Transportation Infrastructure Using Geosynthetics

CSIR–CRRI in collaboration with The International Geosynthetics Society (IGS) – India Chapter, successfully conducted a two-day national workshop on "Carbon Footprint and Sustainability Evaluation for Transportation Infrastructure Using Geosynthetics" on 1st and 2nd December 2025 at the CRRI campus, New Delhi. The workshop brought together leading geotechnical experts, academicians, industry professionals, policy stakeholders, and young researchers to deliberate on sustainable, low-carbon solutions for transportation infrastructure. The inaugural session was graced by eminent dignitaries including Dr. R. K. Bhandari, Former Director, CBRI (Guest of Honour); Shri L. P. Padhy, CGM (Technical), NHAI (Chief Guest); Prof. T. Sivakumar Babu, Retired Professor, IISc, and President, IGS India Chapter; Prof. Manoranjan Parida, Director, CSIR-CRRI; Dr. Kanwar Singh, Chief Scientist and Head, Geotechnical Engineering Division, CRRI; Ms. Dola Roychowdhury, Vice-President, IGS India Chapter; and Dr. Parvathi G. S., Principal Scientist, Geotechnical Engineering Division, CRRI & Organising Secretary. The speakers highlighted the growing importance of sustainability, life cycle assessment, and carbon-conscious design in India's rapidly expanding highway sector.



National Conference on Nanotechnology Applications in Pavement Engineering (NANOPAVE 2026)

The National Conference on *Nanotechnology Applications in Pavement Engineering (NanoPave 2026)* was organized by CSIR–Central Road Research Institute (CSIR–CRRI), New Delhi, on 09–10 March 2026. The conference served as a significant national platform bringing together scientists, academicians, industry experts, policymakers, and research scholars to discuss recent advancements and future directions in nano-enabled pavement technologies.

The event focused on the integration of nanotechnology in pavement engineering to enhance structural performance, durability, and environmental sustainability. Key themes included nanomaterials for bituminous and concrete pavements, photocatalytic and emission-absorbing technologies, advanced nano-characterization techniques, and sustainable infrastructure solutions.

A major highlight of the conference was the presentation of outcomes from the CSIR FIRST project on the development of emission-absorbing pavement materials. These innovations aim to mitigate vehicular pollution directly at the road surface using nano-engineered solutions, demonstrating strong potential for patenting and commercialization.

The two-day program comprised inaugural and plenary sessions, three technical sessions, poster presentations, and a panel discussion involving government and industry stakeholders. Experts from premier institutions such as IITs, CSIR laboratories, and industry organizations shared insights on material innovation, performance enhancement, durability, and smart infrastructure systems.

Overall, NanoPave 2026 emphasized the transition of pavement engineering from conventional performance-based design to environmentally responsive and sustainable systems. The conference successfully fostered collaboration among academia, industry, and government, paving the way for the development and deployment of next-generation nano-enabled road infrastructure in India.



A Technology Transfer Event organised at CSIR Science Centre, Lodhi Estate, New Delhi, held on 24-12-2025



A Technology Transfer Event organised at Dr. Ambedkar International Centre, New Delhi

CSIR-CRRI organized an event on 07 January 2026 at Dr. Ambedkar International Centre, New Delhi, for the formal transfer of the technology titled “A Process of Producing Bio-Bitumen from Pyrolysis of Lignocellulosic Biomass” to fourteen (14) industries. The programme was honoured by the gracious presence of Sh. Nitin Gadkari ji, Hon’ble Minister of Road Transport & Highways (MoRTH) , Dr. Jitendra Singh ji, Hon’ble Minister of Science & Technology (MoST) , Dr. N. Kalaiselvi, Director

General, Council of Scientific & Industrial Research (DG, CSIR) & Secretary, DSIR, and the Director, CSIR-Indian Institute of Petroleum (CSIR-IIP), Dehradun.



JIGYASA Programme

The Council of Scientific and Industrial Research (CSIR) has launched a student-scientist connect programme called 'JIGYASA' on July 06, 2017, under which CSIR has joined hands today with Kendriya Vidyalaya Sangathan nad Navodaya Vidyalay Samiti. The focus of this programme is to connect school students and scientists so as to extend student's classroom learning with that of a very well planned research laboratory based learning. This initiated scientific interaction between present scientific fraternities and the upcoming generation and also imbibed curiosity and scientific vision in children. The mentorship and encouragement of our scientists to foster scientific temper give continuity for technological advancement of India. This inculcated the culture of inquisitiveness on one hand and scientific temper on the other, amongst the school students and their teachers.

During the period, the following events were organised for the school students.

Sr.No.	Activity / Event	Date	No. of Students
1.	CSIR-CRRI Foundation Day celebration – Educational Visit Pm Shri KV Delhi Cantt Ni. 1	July 16, 2025	92
2.	One Day as a Scientist Day 1 - R&D divisionsl Visit and Day 2 - visit and Soil testing used for road contrcution Day 3 – Visit and Road safety lecture and quiz with prizes Day 4 – visit and quiz Day 5- visit and quiz was hled	July 21–25, 2025	95 121 108 108 108

3.	Dr. Pradeep Kumar ,Bes, Division , STO(3) delivered a lecture on “Overview of Bridges”	August 29, 2026	100
4.	CSIR Foundation Day PM sHri KV Delhi Cantt NO.1	September 28, 2025	92
5.	Visit Pm Shri KVINA Cpoly new delhi Pm Shri KV KNN Ghazaiaabad	October 14, 2025	95 105
6.	Important Awareness Days The curtain Rasier IISF 2025 alongwith Janjatuya Gaurav Divas Clebration PM Shri KV Masij Moth Tagore International Public Sshcool	November 28, 2025	110 110
7.	Outreach Programme Pm Shri KV Noida - Sh.Sahashi Bhusan Technical Officer(3) from BESs delivered a lecture on “The Role of Bridges in Road Infrastructure”	December 22, 2025	100
8.	Importtatin Awareness Days- National Raod Sfety Month 2026 PM Shri KV AFS Tuglakabad Dev Samaj Modern School, Sukhdev Vihar, New DELhi	January 21, 2026	195
9.	PM Shri KV Hapur, Utter PRadesh	February 16, 20206	79



Visit of students from PM Shri KV Hapur, Uttar Pradesh on February 16, 2026

Honours & Awards / Appreciations Received

Honours & Awards

- Sh. Sachin Gowda and Dr. Aakash Gupta received the Bihar PWD Medal from Hon'ble Minister for Road Transport and Highways Sh. Nitin Gadkari Ji for the Best Paper on Road Research at the 84th Annual Session of IRC held at Bhubaneswar (Odisha) from 7th to 10th November 2025



- Best Paper Award for the paper titled “A review of glare sources and mitigation technologies in defense systems” authored by Dubey, V., Agrawal, D., Gupta, K. and Karar, V. from the organisers of Innovative Digital Technologies and Applications for Sustainable Society Development (IDTASSD), 68th Annual IETE Convention (AIC-2025), during September 27-28, 2025.
- Sh. Sachin Gowda, Dr. G. Bharath and Dr. Deepa, S. received the Best Paper Award for the paper titled, “Influence of GlassGrid Reinforcement on Cracking and Rutting Performance of Asphalt Overlays” in the Transportation Research Efforts for Ecological Sustainability - 2025 (TREES-2025) conference held during 24–25 October 2025 at the Department of Civil Engineering, VNR VJIET, Hyderabad.



- Ms. Amjadha, Ms. Linitta, and Dr. Sampath Kumar P. received Best Paper Award at the Conference on Sustainable Planning, Architecture and Civil Engineering (SPACE 2026), organized by the Department of Architecture and Planning, National Institute of Technology (NIT) Kurukshetra (Jan 23–25, 2026).
- Anshul Saxena and Pradeep Kumar, Hardeo Kumar Thakur, and Isha et al. received Best Paper Award, for the paper titled “Remote Sensing (RS) Terrain Analysis for Mapping Water Accumulation Zones: Towards a Sustainable Rainwater Harvesting Approach for Cities” at the International Conference on Multidisciplinary Perspectives in Advanced Computing and Technology (IMPACT-2026), held on 10th–11th January 2026 at GBPUAT, Pantnagar, Uttarakhand, India.
- Prof. Manoranjan Parida and Satish Pandey, Senior Principal Scientist receiving honours at Inauguration and inspection of PMGSY road at Gonda UP built using Modified Mix Seal Surfacing technology by Director General CSIR Dr. N. Kalaiselvi along with Chief engineers of UPRRDA and Directors of various CSIR labs



- Dr. Errampalli Madhu, Chief Scientist, Dr. Kayitha Ravinder, Chief Scientist, Dr. A. Mohan Rao, Chief Scientist and Dr. S. Padma, Senior Principal Scientist received **Certification of Competence: Road Safety Auditor - Observer Level** from IRF International on 17th October 2025.
- Satish Pandey, Senior Principal Scientist receiving Certificate of Appreciation by Director CSIR-CRRI for Modified Mix Seal Surfacing (MSS+) Technology



- Satish Pandey, Senior Principal Scientist received certification for Winner of Ministry of Road Transport and Highways Hackathon 2024 for Demonstration Trial and Performance Assessment of REJUPAVE Asphalt Modifier for low temperature laying of bituminous mixes under Low Carbon Technology segment.



- Dr. Vaibhav Mittal, Scientist , IGS-Best Doctoral Thesis Award Sponsored by Prof. M.R. Madhav for the Year 2024 for my work on "Assessment of Seismic Response of Buildings for Different

Foundation System considering Soil-Structure Interaction" at Indian Geotechnical Conference (IGC 2025) held at NIT Jalandhar, December 18-20, 2025.

- Dr. Abhijit Chakraborty (Scientist) served as a co-session chair at the Indian Geotechnical Conference on 'Geotechnical Practices for Innovations and Sustainability (IGC 2025)' held during 18-20 December 2025 at the Department of Civil Engineering, Dr. D. R. Ambedkar National Institute of Technology, Jalandhar, Punjab, India.
- Vivek Dubey, Divya Agrawal, Kamini Gupta, Vinod Karar. "A review of glare sources and mitigation technologies in defense systems", In Innovative Digital Technologies and Applications for Sustainable Society Development (IDTASSD). 68th Annual IETE Convention (AIC-2025), CSIR-CISO Chandigarh, 27th -28th Sept, 2025.
- Dr. Bari Chintaman - Best Thesis Award at 8th Conference of the Transportation Research Group of India (CTRG-2025), 17-20 December 2025, IIT Guwahati, India
- Jahanvi Saraswat, Kavita Verma, Kamini Gupta, Vinod Karar*, S Velmurugan, "Experimental Validation of Simulator Based Driver Assessment for Real World Safety", authored by in Save Lives on Roads, India Conference, Hotel Leela Palace, New Delhi. 23rd Feb 2026
- Dr. Ravindra Kumar invited to Chair the session on "Other Applications in Transportation Engineering" during the 11th International Conference on Transportation System Engineering and Management (CTSEM) held at MANIT, Bhopal, July 4–5, 2025.
- Dr. Ravindra Kumar invited as Co-Chair in the 84th Annual Session of the Indian Roads Congress (IRC).
- Dr. Ravindra Kumar served as Member, Assessment and Recruitment Committee for CSIR–IGIB Technical (Gr. III) staff.
- Dr. Ravindra Kumar invited to Co-Chair the session on "North East Road Sector Challenges" during the Conference on Transportation Research Group (CTRG) held at IIT Guwahati , 21-24–December, 2025
- Dr Rina Singh served as Member, Assessment and Recruitment Committee for CSIR–CRRI, Technical (Gr. III) staff.
- Paper entitled 'Optimization of TiO₂ Nanoparticles for NO_x Removal in Photocatalytic Pavement Systems' by Komal, Bismaya Sahoo, Bhumi Gupta, Rina Singh, Siksha Swaroopa Kar (2026) got second prize in Poster presentation in NANOPAVE 2026 conference, Nanotechnology Applications in Pavement Engineering (Nano Pave 2026), 9-10th March 2026.
- Paper entitled 'Plasmonic Nanoparticle SERS Platforms for Roadside Pollutant Sensing', by Bhumi Gupta, Dr. Rina Singh got consolation prize in Poster presentation in NANOPAVE 2026

Conference, Nanotechnology Applications in Pavement Engineering (Nano Pave 2026), 9-10th March.

- Paper entitled 'Fatigue–Healing Performance of Graphene Oxide/Polymer Modified Bitumen: Influence of GO Content and Polymer Type' by Lakshmi T, Rina Singh and Abhishek Mittal got third prize in poster presentations in NanoPave 2026 conference, Nanotechnology Applications in Pavement Engineering (Nano Pave 2026), held on 9-10th March 2026.
- Dr. Parvathi G. S. (Principal Scientist) received the prestigious 16th CIDC Vishwakarma Award, 2025, for her achievement in the category of Scientist Working in the Construction Industry on 11th April 2025.
- Dr. Parvathi G. S. is elected as a fellow of the Indian Geotechnical Society.
- Dr. Ravi Shankar S. received the Best Paper Award at IGC 2025 for the work titled “Recycled C&D Waste Aggregates for Sustainable Pavements: Laboratory Insights and Field Experience,” co-authored with Sh. Ayush Dhoundiyal, Dr. Raheena M, and Dr. Sandeep Singh.
- Dr. A. K. Sinha (Chief Scientist) and Syeda Sabina (PhD scholar) received a certificate of excellence and Rs. 25000/- cash prize at Global Road Infratech Summit & Expo organised by the International Road Federation (IRF), India Chapter at New Delhi for his research on, Turning Waste into Wealth: Field application of red mud for eco-friendly futuristic road infrastructure.



- Dr. A. K. Sinha (Chief Scientist) and Syeda Sabina (PhD scholar) received a best poster award at the 8th conference of the Transportation Research Group of India, IIT Guwahati, for the research paper titled - Validation of laboratory modulus of red mud waste material with field modulus.



- Sh. Ishant Kashyap Received Protsahan Puruskar Certificate for "Rajbhasha Poster Competition" organized by National Crime Records Bureau, Ministry of Home Affairs during Hindi Pakhwara 2025 closing ceremony at Sardar Vallabhbhai Patel Auditorium, National Crime Records Bureau (NCRB), Mahipalpur, New Delhi on 08-10-2025.



- CSIR-CRRI received an appreciation certificate from the Central Board of Indirect Taxes & Customs, Ministry of Finance, Govt. of India for timely GST return filing for the financial year 2024-25 on 01-07-2025



- Dr Naveet Kaur, Principal Scientist received following Awards and Recognitions:
 - Won 16th CIDC Vishwakarma Award for Scientist/ Academician” on 11th April 2025.
 - Won IAStructE Award for “Outstanding women Engineer of the year 2025”, November 15, 2025
 - Received Ashoka Award 2025 by Charles Walter’s society for Innovation & Research (CWSIR) on Oct 12 ,2025 at Indian Habitat Centre. Award given by Mr Kalraj Mishra Former Cabinet minister and Governor of Himachal Pradesh and Rajasthan.
 - Awarded Engineer of the Year (Female) 2025 on Engineers day by Concrete Engineers Association on Sep15, 2025.
 - [CSIR CRRI](#) has been awarded the Special Jury Award by CE&CR for its project "Development of Remotely Piloted Aerial Vehicle Bridge Monitoring System" under the category 'Path breaking Construction Materials and Technologies' on August 22, 2025.
 - Best Case Study (2nd Runner Up) Award to [CSIR CRRI](#) and in the category of “Best Case Study on Research for New Technologies and Innovation in Corrosion Management” at the 2nd CII National Corrosion Management Practices - Competition & Awards held at Chennai Trade Centre on July 17, 2025.
 - Invited as External international reviewer for proposal 26.12334-051 RANNIS for Icelandic Research Centre on “Smart Widows with Integrated Self-Cleaning and Air Quality Monitoring(SWIM).
 - Served as Jury member for the 4th CE & CR Awards- 2025,
 - Panelist and gave views on “Corrosion Prevention in Bridges” during the seminar on “Best Practices, Emerging Trends and Technologies in Planning, Construction and Maintenance of Bridges” organized by IRC, April 26, 2025
 - Conference Secretary and Session Chair of 11th Conference on Transportation Systems engineering and Management (CSTEM 2025), MANIT Bhopal July 4-5, 2025 organised jointly by MANIT Bhopal and CSIR-CRRI
 - External Expert for interviews of Research Associate and Project Assistant for HSCC sponsored research project “Structural Safety Assessment and Analysis of Strengthening

- Measures for Redevelopment works of east Kidwai Nagar, New Delhi”, May 12, 2025
- Won the 'Best Presentation [Award](#)' during DSTsponsored 5-Day Training Program on 'Leadership Communication: The Key to Success' at Indian Institute of Management (IIM) Visakhapatnam during March 9-13, 2026.

Invited Talks/ Lectures Delivered / Meeting Attended (Outside CRRI)

Invited Talks and Lectures Delivered

Name & designation of staff	Title of Lecture/Speech	Purpose (conference or otherwise) Give full details	Date
Romeil Sagwal, Sr. Scientist	Cement Concrete Mix Design for Pavements	Training Program on “Quality Control Works in Laboratories and Field Practices for Road Construction” for the AE/JE, Guwahati, Assam	July 14-18, 2025
Dinesh Ganvir, Sr.Pr. Scientist	Construction and Quality Control of Rigid Pavement	Pavements Design and Analysis of Flexible & Rigid Pavement organized by National CPWD Academy, Ghaziabad	July 06-07, 2025
	Design and Construction Aspects of Whitetopping	Pavements Design and Analysis of Flexible & Rigid Pavement organized by National CPWD Academy, Ghaziabad	July 06-07, 2025
	Maintenance and Rehabilitation of Rigid Pavement	Pavements Design and Analysis of Flexible & Rigid Pavement organized by National CPWD Academy, Ghaziabad	July 06-07, 2025
Dr G Bharath, Principle Scientist	Next-Generation Sustainable Materials for Pavements	Highway Operators Association of India (HoAI), National Annual Conference 2026, New Delhi	Feb 27, 2026
	Sustainable Recycling Approaches in Pavement Construction.	3 rd International Conference on Smart Sustainable Cities (ICSSC), Siddhartha Academy of Higher Education, Vijayawada	Nov 27–28, 2025
	Pavement Recycling	5-Day Workshop on “ <i>Advanced Technologies in Civil Engineering.</i> ” G. Pulla Reddy Engineering College, Kurnool, Andhra Pradesh.	Dec 08–09, 2025
	Premature Failures in Pavements: Challenges and Sustainable Solutions	Transportation Infrastructure Projects: Conception to Execution (TIPCE), IIT Roorkee.	Sept 18–21, 2025
	Full Depth Reclamation	The event brought together a diverse audience, including road contractors, consultants, QA–QC engineers, pavement engineers, highway authorities, researchers, and students. Organized by Hindustan Colas	Sept 15, 2025
	Bio-Bitumen VIA Pyrolysis: From Farm Residue To Roads	One-Day Technical Workshop on “Complete Biomass Utilisation Ecosystem with Special Emphasis on Torrefied and MSW Pellets”, at	Mar 11, 2026

		Power Management Institute (PMI), NTPC Ltd., Noida.	
	Pavement Recycling	FDP programme at JSS Science and Technology University, Mysuru,	Sept 15, 2025
	Full Depth Reclamation	Delivered a lecture for the Provisionally Empanelled National Quality Monitors (NQMs), organised by IAHE, Noida,	Aug 26–29, 2025
	Pavement Recycling	One Week Online Faculty Development Program (FDP) on “ <i>Emerging Trends in Civil Engineering</i> ” Organized by SRKR Engineering College, Bhimavaram	Nov 24–28, 2025
	Pavement Recycling	Invited lectures to 3rd-year B.Tech students under the course – <i>Sustainable Pavement Materials and Construction</i> ,	April 2025
	Field Diagnosis of Pavement Failures and Effective Maintenance Interventions	One-Week Professional Development Program (PDP) on “ <i>Sustainable Pavement Asset Management in the Era of Smart Infrastructure</i> ,” Vardhaman College of Engineering, Hyderabad.	Nov 19, 2025
	Design of Pavement strengthening using Geosynthetics	Five-day Training course on the Applications of Geosynthetics in Road Infrastructure Projects, NIT Warangal.	Nov 15–19, 2025
	Design of Pavement strengthening using Geosynthetics	Five-day Training course on the Applications of Geosynthetics in Road Infrastructure Projects”, VNRVJIEIT, Hyderabad	Apr 21–25, 2025
	Design of Pavement strengthening using Geosynthetics	Five-day Training course on the Applications of Geosynthetics in Road Infrastructure Projects, Galgotia University, Greater Noida, UP	Apr 7–11, 2025
Dr Siksha Swaroopa Kar, Senior Principal Scientist	Design of Pavement strengthening using Geosynthetics	Five-day Training course on the Applications of Geosynthetics in Road Infrastructure Projects, NIT Goa.	Apr 14–18, 2025
	Design of Pavement strengthening using Geosynthetics	Five-day Training course on the Applications of Geosynthetics in Road Infrastructure Projects, Odisha University of Technology and Research	Nov 15–19, 2025
	Decarbonisation of Road Construction Sector	Roundtable discussion on Transport in Climate Action: National Priorities and Global Expectations for COP30" organized by TERI	Sept 26, 2025.

	Cold Mix technology for road construction and maintenance“	Workshop on "Emerging Technologies for Sustainable Road Infrastructure Path to Develop Madhya Pradesh, KAYAKALP-2025 organised by Department of Urban Development & Housing MP at Bhopal, Madhya Pradesh	Sept 19, 2025
	From Lab to Highway: Sustainable and Smart Construction Practices for India’s Future Roads”	Expert Lecture at Smart Mobility Conference 2025, Delhi	Oct 07, 2025,
	“Impact of Bitumen Emulsion Composition on Cold Recycling Performance for Low and High Traffic Pavements”	International Conference on Bitumen Emulsion 2025	July 18, 2025
	Participated and presented (virtual) feedback at	“Stakeholder Feedback Workshop on “Development and Assessment of High Polymer Modified Bitumen Binder and Mix for Heavy Traffic Road” NIT Raurkela,	May 24, 2025
	India’s Road Network and Future Development from the perspective of a CSIR CRRI	Modified Asphalt Research Center 2nd Future Research Focus Workshop" organized by MARC, University of Wisconsin-Madison.	Feb 20, 2025.
	“Indian Road Infrastructure: The impact of CSIR-CRRI’S Contribution” as part of CSIR Raman Research Fellowship.	a) Department of Civil, Construction, and Environmental Engineering, North Carolina State University, Raleigh, Nort Caralona, USA. b) National Center for Asphalt Technology, Auburn University (NCAT), Alabama USA c) Center for Research and Education in Advanced Transportation Engineering Systems (CREATES),Rowan University, Glassboro, New Jersey, USA d) Illinois Center for Transportation, University of Illinois Urbana-Champaing IL, USA Department of Sustainability, California State University, Northridge, California, USA	Jan 28-May 28, 2026
Dr. Sarfaraz Ahmed Scientist	Sustainable Pavement Engineering and its Practice in Indian Context	Delivered a keynote Lecture on Advanced Civil Engineering Practices for Sustainable Infrastructure Development (ACED) Organized by The Institution of	Nov 28, 2025

		Engineers (India), U.P. State Centre, Lucknow	
Dr. Rajeev Goel, Chief Scientist	Understanding the Vulnerability of Bridges on National Highways due to Climate Change	NIDM Workshop on “Climate Adaptation Policy & Guidelines for Resilient Highway Bridges”, NIDM, Delhi	April 03, 2025
	Effect of Climate Change on Design of Bridges	Seminar on “Best Practices, Emerging Trends and Technologies in Planning, Construction & Maintenance of Bridges”, organised by Indian Roads Congress and PWD, Assam at Guwahati, April 25-26, 2025	April 26, 2025
	Load Testing of Bridges	Training program for PWD official of Government of Orissa at Bhubaneswar	May 07, 2025
	Policy, Guidelines and Capacity-Building Frameworks for Climate and Disaster Resilient Highways	National Conference on ‘Climate Adaptive Resilient Highways (CARH)’, organized by NIDM during October 30-31, October 2025 at Dr. Ambedkar International Centre, New Delhi	Oct 31, 2025
Dr Naveet Kaur, Principal Scientist	Science behind Sensors and SHM’	Certificate course by SSPL, India, IIT Delhi incubated company, IITD	April 19, 2025
	Revolutionising Structural Assessment with Drone-based Technology	Special lecture for CVL864 Course at IIT Delhi	April 24, 2025
	Engineering Resilience: Science behind Structural Health Monitoring	Short term course on “Integrating Advances in Geotechnical and Highway engineering for sustainable and Resilient Transport Infrastructure, Dr BR Ambedkar NIT Jalandhar	April 29, 2025
	Advance technologies for Bridge Inspection	For PWD Officials of Govt. of Odisha	May 7, 2025
	Structural Safety Audit of interchanges, minor bridges, VUP on Yamuna Expressway (165 km approx) in the state of Uttar Pradesh	RC Meeting at CSIR-CRRI	July 10, 2025
	Revolutionising Structural Assessment with Drone-based Technology	Organised by IAstructE	Oct 24, 2025

General Road Research Report (GRRR) on Bridge Engineering	84 th Annual Session of IRC, Bhubaneswar, Odisha ,	Nov 09, 2025
General Design Features of Bridges-IRC:5	Training program 'Design of Bridge Structure and Foundation' organised by CSIR-CRRI	August 04, 2025
Condition Assessment using Drones	Training program 'Design of Bridge Structure and Foundation' organised by CSIR-CRRI	August 08, 2025
Drone Driven Diagnostics- An innovation Approach to structural Condition Assessment	Organised by Concrete Engineers Association at Club Constitution of India , New Delhi	Sep 15, 2025.
Drone Diagnostic- An Innovative Approach to Structural Condition Assessment	ICI National Conference on Innovation in Repair, Rehabilitation and Retrofitting of Structure(3R), at Scope Convention Centre, New Delhi	Sep 20, 2025.
Revolutionizing the structure Inspection using Drone diagnostics	Organized by IAStuctE	Oct 24, 2025.
Structural Assessment using drone technology	Tata Projects	Nov 17, 2025
Drone Technologies for Bridge Inspection	Short term training FDP course on 'Recent Advances and Emerging Technologies in Civil Engineering' Gautam Buddha University	Nov 24, 2025
Emerging Drone based Technologies for Condition Assessment of Structures"	Anusandhan National Research Foundation Sponsored 3-Day National Seminar on Emerging Applications of Geosynthetics and Drone Technologies in Modern Construction Practices, at IIT Indore	Dec 07, 2025
Drone based Technologies for Condition Assessment of Structures	Hong Kong Polytechnic University (PolyU), Hong Kong for research collaboration, at Hong Kong	Dec 24, 2025
Science behind Structural Health Monitoring	BES training programme on "Quality Assurance, Inspection of Bridges, Assessment and Rehabilitation of Bridges", CSIR-CRRI	Jan 22, 2026
Making Piezoelectricity sensing to Skies	Technical workshop on International Workshop on "Women Scientists in Structural Health Monitoring", International Women Day 2026 celebration at IIT Delhi, organised by ISHMS	March 7, 2026

Dr. Sampath Kumar Pasupunuri, Scientist E	Structural Evaluation of Flexible Pavements	Training to newly joined AEEs in Odisha Works Department	Jan 29, 2026
Dr Deepa S, Scientist D	Full Depth Reclamation of Pavements	Faculty Development Program, Department of Civil Engineering, Netaji Subhas University of Technology	Sept 25, 2025
Dr. Vidhi Vyas, Scientist D	Non-destructive tools & techniques for pavement evaluation	International Conference on Sustainable Planning, Architecture and Civil Engineering (SPACE 2026) NIT Kurukshetra	Jan 23–25 , 2026
	Meeting	NHIDCL project at Agartala, Tripura	Nov 01-02 , 2025
	Meeting	APMS project at Gaggal Airport	Dec 16-17, 2025
Dr. Aakash Gupta, Scientist D	Modern technologies in Pavement evaluation	Faculty Development Program – Civil Engineering Department NIT Jalandhar	April 28, 2025
Dr. Pradeep Kumar, Scientist G & Dr. Aakash Gupta, Scientist D	Use and validation of iPAVE in India	MORTH	April 29, 2025
Sachin Gowda M K, Scientist D	Road Asset Management Systems (RAMS) for Sustainable Infrastructure: Strategies, Insights, and Case Studies	1-day Technical Symposium on "SMART, SUSTAINABLE & RESILIENT ROADS", organized by the Department of Civil Engineering, Siddaganga Institute of Technology, Tumkur.	April 25 , 2025
	Pavement Evaluation and Management	Online Faculty Development Programme On Recent Advancement in Transportation Engineering 2025, Organized by Department of Civil Engineering, SJCE, Mysore	Sept 18, 2025
	Next Generation Self-Healing Pavements	5 th Edition of the Global Road Construction Conference (GRC 2025) held at Indira Gandhi Pratishthan, Lucknow.	Dec 19, 2025
	Self-Healing Pavements	National Conference on Nanotechnology Applications in Pavement Engineering (NanoPave 2026)	March 10, 2025
Mukti Advani	Brainstorming Seminar on National Road Safety Policy – 2025	School Zone Road Safety, Summit Hall, Level 2, Bharat Mandapam, New Delhi	May 01, 2025

	Chaired by honorable minister Shri.Nitin Gadkari ji,		
	Learning and Unlearnings for better Road Safety and Environment on Indian Roads	Roads & Building Department of Gujarat	Dec 12, 2025
	Conference on “Smart Mobility Systems (ICSMS-2025)”	56th MID-TERM SYMPOSIUM & INTERNATIONAL at Ambedkar International Centre, 15 Janpath, Windsor Place, New Delhi-110001.	April 26-27, 2025
	World Symposium on Sustainable Transport and Livability (WSSTL-2025)	Indian Institute of Science Bengaluru (IISc-Bengaluru)	June 25-27, 2025
	‘Active Transportation’ as a part of a program by	Gati Shakti Vidyalaya at Vadodara Gujarat	Nov 07, 2025
	The National Summit on VRU and Road Safety Dialogue to Action	Trax Society at Novotel City Centre, Deshbandhu Gupta Road, New Delhi.	June 12, 2025,
Minal Chandra	The National Summit on VRU and Road Safety Dialogue to Action	Trax Society at Novotel City Centre, Deshbandhu Gupta Road, New Delhi.	June 12, 2025
	BIS Meeting of SSD 01 Sectional Committee on Transport Services		June 04 –Sept 04, 2025.
	BIS meeting of Sustainable Cities and Communities Sectional Committee, CED 59		August 22, 2025
Farhat Azad	Mothers and daughters of Innovations: Gender issues in entrepreneurship.	CINE: Understanding Creativity, Innovation, Knowledge Networks And Entrepreneurship at IIM-A	Oct 10, 2025
Dr. Ravindra Kumar	Panelist in Roundtable Discussion on “Cyber Resilience & Data Protection – A National	Panel Discussion	Oct 14, 2025

	Imperative for Critical Infrastructure”		
	Speaker & Panellist on “Emission-Based Charging Models in India and Singapore”	Road User Charging Conference, Singapore	Oct 01-02, 2025
	Workshop on “Sustainability of the Digital–Cyber World”	One-day Workshop organized by INSA & Kotak School of Sustainability, IIT Kanpur	May 08, 2025
	Guest Lecture on “Recent Advances in Transportation Engineering and Their Impact on Sustainable Urban Development”	Department of Civil Engineering, MERI-CET	Sept 06, 2025
	Expert Lecture on “GIS Applications in Infrastructure Development and Transportation Engineering”	Kendriya Vidyalaya, Noida	Sept 23, 2025
	Speaker on “Digital Innovation in Land Acquisition of Highways Using Satellite Imageries to AI-Driven Decision Making”	AEC Forum – Geospatial Digital Twin	Aug 21-22, 2025
	Panelist	D-arc BUILD – Shaping the Future of Cities	Aug 30, 2025
Dr. Errampalli Madhu, Chief Scientist	Invited Keynote Presentation on “Harnessing Real-Time Intelligence for Safer, Efficient, and Sustainable Traffic Solutions”	Round Table Conference on Data Driven Advanced ATMS organized by ITS India Foun	June 20, 2025
	Invited lecture on “ITS for Safer Road and Improving Road Safety”	Training Programme on “Intelligent Transportation System Applications for Highways” organised by Indian	Aug 22, 2025

		Academy of Highway Engineers (IAHE)	
	Invited Keynote Presentation on “Public Bus Transport Services – Guidelines” IS 19225 : 2025 Indian Standard	BIS Stakeholders Workshop on Public Transport Guidelines	Aug 28, 2025
	Special Address on “Capacity Building in ITS Sector “	CURTAIN RAISER Event on Capacity building – A Game Changer for ITS Sector organized by South Asian University (SAU), New Delhi	Sept 10, 2025
Dr Rina Singh, Senior Principal Scientist	Invited Lecture on ‘Nano Titania and its Role in Environmental Friendliness’	Centre for Sensors, Instrumentation and Cyber Physics Department, IIT Delhi	Febr 12, 2026
Ms. Kamini Gupta, STO	Lecture delivered on Use of Eye Tracker	External examiner (M.Tech) at VNIT, Nagpur	June 10-13, 2025
Dr. Ramesh Chandra Majhi, Principal Scientist	Leveraging Optimization Models for Smarter Mobility and Green Energy Systems	Gurobi Days, Delhi	Sept 18, 2025
	Emerging ITS Technologies for Highway Design	1 st ITS India Congress, IIT Hyderabad	Nov 06–07, 2025
	Urja Path – Electric Mobility & the Future of Highways	MargShakti 2025 – Industry Conclave on Data-driven Mobility and Infrastructure Innovation, IIT BHU	Nov 21–22, 2025
	Investigating the feasibility of wireless charging facilities for BEB operation in New Delhi	Workshop on “Electrification of Heavy Vehicles”, IIT Tirupati	Nov 28, 2025
Dr. Bari Chintaman, Scientist C, TES	Publication Workflow and Enhancing Impact	Speaker in Five-Day FDP on “Research Writing, Proposals, Funding, and IPR.” Organized by TSSM’s Bhivarabai Sawant College of Engineering and Research (BSCOER), Narhe, Pune	Dec 23, 2025
	“Urban Transport in Indian Cities” - Challenges and Solutions (Lessons from noble Indian and International practices)	Urban Mobility Workshop organized by Pune Municipal Corporation, Pune	Feb 17, 2026

Dr. Parvathi G. S. Principal Scientist	“Advanced Imaging Approaches for Multiscale Physical and Mechanical Characterization of Geosynthetics”	National Symposium on Scaling Geosynthetics in India: Market Outlook and Strategic Business Approaches, IIT Bombay	March 07, 2026
	“Designing Climate-Resilient Coastal Road Protection Systems: Insights from the Shankumugham Road Project in Thiruvananthapuram.”	Online Short-Term Course on 'Integrating Advances in Geotechnical & Highway Engineering for Sustainable and Resilient Transportation Infrastructure', NIT Jalandhar	April 28, 2025
	Design of Embankment and RE Walls and Hands-on training on Embankment design and RE wall design software	Indian Academy of Highway Engineers Foundation Training Programme for Assistant Executive Engineers of MoRTH	Oct 25, 2025
	Development of ‘Biodegradable Prefabricated Vertical Drain’ by Molding Technique– A Sustainable Solution for Road Construction Over Soft Soil	Monitoring committee meeting for CSIR FBR projects at CBRI Roorkee, and National Science Center, New Delhi	Oct 13-March 02, 2025
	Development and Field Testing of ‘Biodegradable Prefabricated Vertical Drain’ – A Sustainable Solution for Road Construction Over Soft Soil	10 th Mission Steering Group (MSG) Review Meeting	July 03, 2025
	Cost-Benefit Analysis of Climate Adaptive Options for Resilient Highways	Attended Consultative workshop as an expert	Feb 04, 2026
Dr. A. K. Sinha	Valorisation of phosphogypsum waste for sustainable road construction- a pilot study.	IRC annual Session	Nov 08, 2025
	Application of different waste materials in road construction	IRC seminar	Aug 30, 2025
Dr. Ravi Shnakar S. Senior Scientist	Delivered a keynote lecture - Industrial waste materials for road construction.	Conference on “Advanced Civil Engineering Practices for Sustainable Infrastructure Development (ACED-2025)”,	Nov 28-29, 2025
	Lecture on “Reinforced Soil Structures”	A five-day training program on "The Application of Geo-synthetics in Road Infrastructure Projects" Jointly Organised by NTTM, under Ministry of Textiles and CSIR-Central Road Research Institute (CSIR-CRRI), at the National Institute of Technology, Warangal	Nov 27, 2025

Lecture on “Failure Investigation and Mitigation of Reinforced Soil Structures”	Training program on “The application of Geosynthetics in road Infrastructure Projects” from 15th December to 19th December 2025 at Odisha University of Technology and Research (OUTR), Bhubaneswar	Dec 17, 2025
Lecture on “Reinforced Soil Structures”		Dec 18, 2025
Lecture on “Failure Investigation and Mitigation of Reinforced Soil Structures”	Training program on “The application of Geosynthetics in road Infrastructure Projects” 21st to 25th April 2025 at Vallurupalli Nageswara Rao Vignana Jyothi Institute of Engineering & Technology (VNRVJiet), Vignana Jyothi Nagar, Nizampet (S.O), Hyderabad, Telangana -500 090.	April 21, 2025
Lecture on “Design of Reinforced Soil Structures”		April 22, 2025
Lecture on “Reinforced Soil Structures”	Five-day Training course on the Applications of Geosynthetics in Road Infrastructure Projects” from 14th April to 18th April 2025 at National Institute of Technology (NIT) Goa, Cuncolim, Veroda, Goa 403701	April 14, 2025
Lecture on “Testing and Evaluation of Eosynthetics as per BIS/ASTM Standards”		April 15, 2025
Lecture on “Testing and Evaluation of Geosynthetics as per BIS/ASTM Standards”	Training program on “The application of Geosynthetics in road Infrastructure Projects” from 7 th April to 11 th April 2025 at Galgotias University, Greater Noida.	April 07, 2025
Lecture on “Design of Reinforced Soil Structures”		April 08, 2025

Meeting Attended (Outside CSIR-CRRI)

- Dr. Rajeev Goel, Chief Scientist took exam of B.Tech Civil students of DTU as External Examiner on April 30, 2025.
- Dr. Rajeev Goel, Chief Scientist attended Empowered Committee meeting of NRIDA, held on May 02, 2025.
- Dr. Rajeev Goel, Chief Scientist attended IRC IMRA Committee meeting as Invitee on 2025.
- Dr. Rajeev Goel, Chief Scientist attended Online meeting with Shiv Nadar University for collaborative R&D works on July 01, 2025.
- Dr. Rajeev Goel, Chief Scientist attended Online meeting of Empowered Committee of NRIDA on July 03, 2025.

- Dr. Rajeev Goel, Chief Scientist took exam of M.Tech Civil students of DTU as External Examiner on July 07, 2025.
- Dr. Rajeev Goel, Chief Scientist attended Online meeting of Civil Engineering Division Council on July 09, 2025.
- Dr. Rajeev Goel, Chief Scientist attended Online meeting of Empowered Committee of NRIDA on July 23, 2025.
- Dr. Rajeev Goel, Chief Scientist attended meeting with Member, NHAI on ‘Eastern Peripheral Expressway’ at NHAI, Dwarka, Delhi on July 29, 2025.
- Dr. Rajeev Goel, Chief Scientist attended 234th meeting of IRC Council as Invitee at IRC, New Delhi on August 14, 2025.
- Dr. Rajeev Goel, Chief Scientist chaired the first meeting of the Committee, formed by PWD, Madhya Pradesh in July 2025 to set right the 90 degree bridge in Bhopal on August 28, 2025 at Bhopal.
- Dr. Rajeev Goel, Chief Scientist attended meeting on ‘New Bridge Concept’, organised by IIT BHU at Varanasi on September 12, 2025.
- Dr. Rajeev Goel, Chief Scientist attended Pre-PhD seminar at DTU on September 15, 2025.
- Dr. Rajeev Goel, Chief Scientist participated in ‘Engineers Day’, Organised by Concrete Engineers Association at Constitution Club of India on September 15, 2025.
- Dr. Rajeev Goel, Chief Scientist attended 7th CCTS meeting, organised by BEE at Sewa Bhawan, RK Puram, New Delhi on Sep 25, 2025.
- Dr. Rajeev Goel, Chief Scientist attended Pre-PhD seminar at DTU on October 09, 2025.
- Dr. Rajeev Goel, Chief Scientist attended Online meeting for Assessment of Group-III staff of CSIR-SERC on October 10, 2025.
- Dr. Rajeev Goel, Chief Scientist attended Online meeting for Assessment of Group-III staff of CSIR-NEERI on October 13, 2025.
- Dr. Rajeev Goel, Chief Scientist attended several meetings of sub-group in October 2025, formed by IRC Council in its 234th meeting on 14.8.2025 for ‘Grouping & Combination of IRC codes/Manuals/Guidelines’ and submitted the recommendations which were accepted by IRC council in its 235th meeting at IRC Session at Bhubaneswar on November 07, 2025.
- Dr. Rajeev Goel, Chief Scientist attended Online meeting for Recruitment of Group-III staff at of CSIR-CMERI on November 04, 2025.
- Dr. Rajeev Goel, Chief Scientist attended several meetings of various Committees of Indian Roads Congress and Bureau of Indian Standards

Participation in Conferences/ Seminars / Workshops

Participation in Conferences/Seminars / Workshops

Name & designation of staff	Details of conference/seminar	Venue	Dates
Mukti Advani	Conference of Transportation Research Group of India (CTRG-2025)	IIT Guwahati	Dec 17-20, 2025
Farhat Azad	National Conclave on Longitudinal Cohort Studies: COHORT CONNECT	CSIR-IMMT	Nov 13-14, 2025
S.Padma	Conference of Transportation Research Group of India (CTRG-2025)	IIT Guwahati	Dec 17-20, 2025
Dr Minal Chandra	Global Road Infratech Summit & Expo “Vision Zero India: Integrating Safety, Sustainability and Technology in Infra”	New Delhi India	Feb 05-06, 2026
	AI in Mobility: From Idea to Impact	New Delhi	March 25, 2026
	India AI Impact Summit	New Delhi	Feb 16, 2026
Ravinder Kumar	Speaker at the AEC World Forum on <i>“Resilient Infrastructure through Digitalization: Enabling Viksit Bharat”</i>	Vivanta, Dwarka, New Delhi	August 21-22, 2025
	Invited Speaker at the 8th Workshop on Smart Villages in India – Translating Research into Action	Melbourne Global Center, New Delhi	Sep 08, 2025
	Invited Discussant at the Agro-Logistics Workshop	World Bank Office, HT Building, New Delhi	Sep 18, 2025
Dr S.Padma	Session Chair in RAID 2	Recent Advances in Infrastructure Development Department of Civil Engineering, National Institute of Technology, Calicut	Feb 11-13, 2026
Dr. Ravinder Kumar	Attended the 84th Annual Session of Indian Roads Congress (IRC) as Member Delegate	Bhubhaneswar, Odisha	Nov 07-10, 2025

Dr. Errampalli Madhu, Chief Scientist	AI in Mobility - For a Better Society to Improve Road Safety and UrbanMobility" Summit organised by ITS India Forum and"	IIT Bombay	Jan 31, 2026
	AI in Mobility: From Idea to Impact	New Delhi	March 25, 2026
	Global Road Infratech Summit & Expo "Vision Zero India: Integrating Safety, Sustainability and Technology in Infra"	New Delhi India	Feb 05-06, 2026
Ms. Kamini Gupta, STO	1 st International Conference on Building Urban Infrastructure with Leading Design Innovations Build-2025	Chandigarh University, Punjab	May 29-31, 2025
	233 rd Mid-term council meeting as Council member	Aizwal, Mizoram	June 20-21, 2025
	3 rd International Conference on Transportation Infrastructure Projects: Conception to Execution (TIPCE 2025)	IIT Roorkee	Sept 18-21, 2025
	84 th IRC Annual session	Bhubneshwar, Odissa	Nov 07-10, 2025.
	4 th International Symposium (OHOW 2025) jointly organized by CSIR-CBRI and One health one world research initiative, The University of Tokyo(Japan)	CBRI, Roorkee-Haridwar, Uttarakhand, India	Nov 20-22, 2025.
	40 th National Convention of Electronics & Telecommunication Engineers and National Conference on "IoT and Sensor Embedded IoT: Driving Smart Connectivity"	IEI, Faridabad Local Center	Dec 03-04, 2025.
Dr. Ramesh Chandra Majhi, Principal Scientist & Ms. Kamini Gupta, STO	8 th Conference of Transportation Research Group of India (CTRG-2025)	IIT Guwahati	Dec 17-20, 2025
Dr. Bari Chintaman, Dr. Dharitri Kahali Shri. Abhishek Chakraborty, Scientist C, TES; & Ms. Kamini Gupta, STO	Global Road Infratech Summit & Expo, IRF	Hotel The Ashok, New Delhi	Feb 05-06, 2026
	Mission Save Lives on Roads, India – An Integrated Road Safety Meet	The Leela Palace New Delhi	Feb 23, 2026
Dr. Bari Chintaman, Scientist C, TES	AI in Mobility: From Idea to Impact	Dr. Ambedkar International Centre, Janpath, New Delhi	March 25, 2026
Dr. A. Mohan Rao, Scientist G and HOD, TES Dr. Bari Chintaman,	Road Safety Solutions	The Hotel Lalit, Chandigarh	March 27-28, 2026

Dr. Dharitri Kahali Shri. Abhishek Chakraborty, Scientist C, TES; & Ms. Kamini Gupta, STO			
Dr. Abhijit Chakraborty, Scientist	Indian Geotechnical Conference, 2025	NIT Jalandhar	Dec18-20, 2025
Dr. Ravi Shnakar S. Senior Scientist	TRB 105th Annual Meeting	Washington, DC, USA	Jan 11-15, 2026.
	Indian Geotechnical Conference on Geotechnical Practices for Innovations and Sustainability	Dr B. R. Ambedkar National Institute of Technology, Jalandhar, Punjab-144008 India	Dec 18-20, 2025
	Conference on Transportation Research Efforts For Ecological Sustainability (TREES -2025),	VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad	Oct 24-25 , 2025
	National Conference on Future Challenges For Sustainable Development In Geotechnical Engineering (FCSDGeo-2026)	Jadavpur University, Kolkata	Feb 20-21, 2026
	Global Road Infratech Summit & Expo-GRIS 2026	Hotel the Ashok, New Delhi, India	Feb 05-06, 2026
Dr. Parvathi G. S. Principal Scientist	1 st Geotechasia-2025 - International Conference	Goa, India	Oct 07-09, 2026
	Workshop on Geotechnical Engineering Practice	IIT Delhi	Dec 04, 2025
Dr A K Sinha Chief Scientist	IRC Annual Session	Bhuvneshwar	Nov 07-09, 2025
	IRC Seminar	Lucknow	August 29-31, 2025
Lalita Jangpangi, Senior Principal Scientist	GRIS2026, IRF Conference	Delhi	Febr 05-06, 2026
Dr. Sumit Nandi & Senior Scientist	GRIS2026, IRF Conference	Delhi	Febr 05-06, 2026
Dr. Shubham Raj Senior Scientist	GRIS2026, IRF Conference	Delhi	Febr 05-06, 2026
Dinesh Ganvir, Sr. Principal Scientist	14 th International Conference on Road and Airfield Pavement Technology 2025	Chiang Mai	July 16-18, 2025
Dr G Bharath, Principle Scientist	Transportation Infrastructure Projects: Conception to Execution (TIPCE)	IIT Roorkee, Uttarakhand	Sept 18-21, 2025
	Transportation Research Efforts for Ecological Sustainability (TREES)	VNR VJIET, Hyderabad, Telangana	Oct 24-25, 2025

	84 th Annual Session Indian Road Congress	Bhubaneswar, Odisha	Nov 7-10, 2025
	The International Conference on Bitumen Emulsion (ICBE) 2025	Le Méridien, New Delhi	June 18, 2025
	Full Depth Recycling & Green Technologies in Road Construction	Lucknow, Uttar Pradesh.	Aug 29-30, 2025
Dr. Siksha Swaroopa Kar, Senior Principal Scientist	Participated and Chaired session at 11th International Conference on Transportation Systems Engineering & Management (CTSEM 2025)	Bhopal	July 04-05, 2025
	Participated and co-chaired a session “Implementation, quality control and machineries in FDR and Green Technologies” at Seminar on “Full depth Recycling and Green Technologies in Road Construction” organised by Indian Road Congress,	Lucknow.	Aug 29-30, 2025
	chaired a session at 3rd International Conference on Transportation Infrastructure Projects: Conception to Execution (TIPCE)	IIT Roorkee, Uttarakhand, India.	Sept 18-21, 2025
Dr. Sarfaraz Ahmed, Scientist	Attended Seminar on “Full Depth Recycling & Green Technologies in Road Construction”	Lucknow, Uttar Pradesh	August 29-30, 2025
	Participated in conference on “Transportation Infrastructure Projects: Conception to Execution (TIPCE),	IIT Roorkee, Uttarakhand.	Sept 18-21, 2025
	Participated in conference on “Transportation Research Efforts for Ecological Sustainability (TREES)	VNR VJIET, Hyderabad, Telangana	Oct 24-25, 2025
	Attended Indian Road Congress 84 th Annual Session	Bhubaneswar, Odisha	Nov 07-10, 2025
	Participated in “Advanced Civil Engineering Practices for Sustainable Infrastructure Development (ACED-2025)”	The Institution of Engineers (India), U.P. State Centre, Lucknow	Nov 27-28, 2025
	Presented on 8th Conference of Transportation Research Group of India (CTRG)	IIT Guwahati, Assam	Dec 17-20, 2025
Dr. Pradeep Kumar, Scientist G	NTRO International Technical Conference 2025, 7–9 May 2025 (keynote lecture)	Melbourne, Australia	May 07-09, 2025
Dr. Deepa S; Sh. Sachin Gowda, Scientist D	3 rd International Conference Transportation Infrastructure Projects: Conception to Execution	IIT Roorkee	Sept 18-21, 2025
Dr. Sampath Kumar Pasupunuri; Scientist E, Dr. Deepa S; Sh. Sachin Gowda, Scientist; Scientist D	Conference on Transportation Research Efforts for Ecological Sustainability (TREES)	VNRVJIT, Hyderabad	Oct 24-25, 2025
Dr. Pradeep Kumar; Scientist	84 th Annual Session of the Indian Roads Congress (IRC)	Bhubaneswar, Odisha	Nov 07-10, 2025

G, Dr. Deepa S; Sh. Sachin Gowda; Dr. Aakash Gupta, Scientist D			
Sachin Gowda M K, Dr. Deepa S, Scientist D	IRC workshop on, “FDR and Green Technologies in Road Construction”	Lucknow, Uttar Pradesh	Aug 29-30 , 2025
Sachin Gowda M K, Dr. Deepa S; Scientist D	Advances in Materials and Pavement Performance Prediction (AM3P) conference	TU Wien, Austria	May 07-09 2025,
Sachin Gowda M K, Scientist D	105 th Transportation Research Board (TRB) Annual Meeting	Washington, D.C. USA	Jan 11-15, , 2026
Sachin Gowda M K, Dr. Deepa S; Scientist D	8 th Conference of Transportation Research Group of India (CTRG-2025)	Guwahati, India	Dec17-20, 2025
Sachin Gowda M K, Dr. Deepa S, Dr. Aakash Gupta, Scientist D	Global Road Infratech Summit & Expo (GRIS)	Hotel The Ashok, New Delhi	Feb 05-06, 2026
Sachin Gowda M K, Scientist D	National Conference on Nanotechnology Applications in Pavement Engineering (NanoPave 2026)	CSIR-CRRI, New Delhi	March 09-10, 2026
Dr Deepa S, Dr. Aakash Gupta; Scientist D	International Conference on Bitumen Emulsion,	New Delhi	June 18, 2025
Dr Deepa S, Scientist D	Traffic Infratech Expo	Bharat Mandapam, New Delhi	Oct 07-09, 2025
Dr Deepa S, Scientist D	The Emerging Science, Technology, and Innovation Conclave (ESTIC)	Bharat Mandapam, New Delhi	Nov 03-05, 2025
Dr. Vidhi Vyas, Scientist D	2nd International Conference on Recent Advances in Infrastructure Development (RAID 2.0)	NIT Calicut, Kozhikode.	Feb 11-13, 2026
Dr. Vidhi Vyas, Scientist D	International Conference on Sustainable Planning, Architecture and Civil Engineering (SPACE 2026)	NIT Kurukshetra	Jan 23–25, 2026
Dr. Vidhi Vyas, Scientist D	3rd Indian Near Surface Geophysics Conference & Exhibition 2025	Hotel The Suryaa, New Delhi	Nov 12-14, 2025
Dr. Vinod Karar, Chief Scientist & Head PME	International Conference on Bitumen Emulsion (ICBE) - 2025	Le Méridien, New Delhi	June 18, 2025
Sh Ravinder Deekonda, Sr. Technical Officer (3)			
Smt. Nidhi, Sr. Technical Officer (3)			
Sh Anshul Saxena , Sr. Technical Officer (1)			

Sh. Rajesh Kumar, Technical Officer			
Sh Ishant Kashyap, Technician (1)			
Dr. Vinod Karar, Chief Scientist & Head PME	Brainstorming session with the Business Development Group Heads from CSIR Laboratories	CSIR Innovation Complex, Mumbai.	Jan 19, 2026
Smt. Nidhi, Sr. Technical Officer (3)			
Dr. Vinod Karar, Chief Scientist & Head PME	National Conference on “Nanotechnology Applications in Pavement Engineering” (NanoPave 2026)	CSIR-CRRI, New Delhi	March 09-10, 2026
Smt. Nidhi, Sr. Technical Officer (3)			
Sh Anshul Saxena , Sr. Technical Officer(1)			
Sh. Rajesh Kumar, Technical Officer			
Sh Ishant Kashyap, Technician (1)			

Participation in Training Programs/ Short Term Courses (Outside CRRI)

Participation in Training Programs/ Short Term Courses (Outside CRRI)

Name & Designation of Staff	Topic	Venue	Date
Dr. Rajeev Goel, Chief Scientist	15-day Certification Course on "Road Safety Audit and Other Road Safety Related Aspects"	CSIR-CRRI	May 13-28, 2025
Dr Naveet Kaur, Principal Scientist	Seminar on “Best Practices, Emerging Trends and Technologies in Planning, Construction and Maintenance of Bridges” organised by Indian Road Congress (IRC)	Guwahati, Assam,	April 25-26, 2025
	Attended lecture on “SHM of Heritage and Residential Structure” By Prof. Harpal Singh, Associate Prof. and manager UIT The Arctic University of Norway,	IIT Delhi	Oct 23, 2025
	Attended training program on “Leadership Communication: Key to Success” sponsored by DST	IIM Visakhapatnam	March 9-13, 2026
Sh. Sudhansu Bhagat, Technical Officer	Training Programme on Non-Destructive Testing and Evaluation of Concrete Structures, organised by NCCBM Ballabgarh	NCCBM Ballabgarh	August 27-29, 2025
Dr. Balla Taraka Malleswara Rao, Scientist	Construction of Bridge in Hill Area and Challenges	ESCI, Hyderabad	Feb 16-20, 2026
	Induction Training for Newly Joined Scientists	CSIR HRDC, Ghaziabad	Jan 05 – 10, 2026
Dr. Shubham Saurabh, Scientist	Planning, Design and Construction of Elevated Metro Structures by Indian Association of Structural Engineers	Online	Feb 21-March 28, 2026
	Induction Training for Newly Joined Scientists	CSIR HRDC, Ghaziabad	Jan 05-10, 2026
Dr. Vaibhav Mittal, Scientist	Planning, Design and Construction of Elevated Metro Structures by Indian Association of Structural Engineers	Online	Feb 21-March 28, 2026

	Induction Training for Newly Joined Scientists	CSIR HRDC, Ghaziabad	Jan05 – 10, 2026
Dr. Aman Srivastava, Scientist	Planning, Design and Construction of Elevated Metro Structures by Indian Association of Structural Engineers	Online	Feb 21- March 28, 2026
	Hands-On Training on "Elevate your PSC Composite Bridge Design using MIDAS CIVIL NX"	MIDAS Office Gurugram	Feb 28, 2026
	Induction Training for Newly Joined Scientists	CSIR HRDC, Ghaziabad	Jan 05-10, 2026
Shri Rajesh Rana, Sr. Technical Officer-3	Three Days Training Programme on “Right of Information Act for CPIO & Appellate Authority”	Udaipur	Feb 19-21, 2026
Dr. Siksha Swaroopa Kar, Senior Principal Scientist	Completed the INSA–NCGG LEADS (Leadership Development Program in Science & Technology)	Indian National Science Academy - INSA	Sept 01-06, 2025
	Fully Prepared to Lead: Personal Professional Development Planning” course by the	University of Wisconsin–Madison, USA	Feb 15-May 15, 2025
Lalita Jangpangi, Senior Principal Scientist	Repair and Rehabilitation of Concrete Structures	National Council for Cement and Building Materials (NCCBM), Ballabgarh	May 27 to 29, 2025
	Construction, Quality Control, and Maintenance of Flexible and Rigid Pavements	Indian Academy of Highway Engineers (IAHE), Noida	June 02-06, 2025
	Production of durable concrete	National Council for Cement and Building Materials (NCCBM), Ballabgarh	Feb 24-27, 2026
Dr. Sumit Nandi Scientist	Production of durable concrete	National Council for Cement and Building Materials (NCCBM), Ballabgarh	Feb 24-27, 2026
Dr. Shubham Raj Scientist	Production of durable concrete	National Council for Cement and Building	Feb 24-27, 2026

		Materials(NCCBM), Ballabhgarh	
Dr. Hrishikesh Shahane, Scientist	Induction Programme for Newly Recruited Scientists	CSIR-HRDC, Ghaziabad	Jan 05-10, 2026
Dr. Abhijit Chakraborty, Scientist	Induction Programme for Newly Recruited Scientists	CSIR-HRDC, Ghaziabad	Jan 05-10, 2026
Sh. Mandala Vishnuvardhan, Scientist	Induction Programme for Newly Recruited Scientists	CSIR-HRDC, Ghaziabad	Jan 05-10, 2026
Dr A K Sinha	Global warming and Climate change, resilience	Masoori, Utrakhand	Feb 02-08, 2025
Dr. Bari Chintaman, Dr. Dharitri Kahali Shri. Abhishek Chakraborty, Scientist C, TES	Induction Programme for Newly Recruited Scientists	CSIR-HRDC campus, Ghaziabad	Jan 05-10, 2026
Dr Rina Singh	The INSA-NCGG LEADS Program	Indian National Science Academy , Delhi	April 09-15, 2025
Dr S.Padma	IRF's International Registry of Road Safety Auditors	NHAI Old Office , Dwarka	Oct 06-17, 2025
Dr. Ravindra Kumar	Orientation Workshop on Implementation of Mandatory Course Completion & Assessment on iGOT Karmayogi Portal	Online by CSIR-HRDC, Ghaziabad	Oct 07, 2025
Sh. Sunil Grover, Technical Officer(3), MBSQ Maintenance	Repair & Rehabilitation of Concrete Structures	NCCBM, Ballabhgarh, Haryana	May 27-29, 2025
Sh. Satyajit Nayak	Technical Assistant	IIT Bhubneswar	June 9-13, 2025
Ms. Ching Lydia, Sr. Technical Officer(1), KRC	Research Support Services : Roles of Libraries Professional in Digital Landscape	Department of Library and Information Science North Easter Hill Univer0sity, Shilong Meghalaya	Nov 20-22, 2025
Sh. Dinesh Kuamr Mandal, Technical Officer, BES	CAD Design and Simulation Course (Certified by IITM Pravastak Technologies Foundation and Aitodesk)	IIT-Madras GUVI	
Sh. Ishant Kashyap Technician-I, PME	Project Management	Online-IGOT karmayogi Bharat Portal https://igotkarmayogi.gov.in/ Course offered by Indian Institute of Public Administration	Dec 17, 2025

Sh. Ishant Kashyap Technician-I, PME	Intellectual Property Rights Law and Technology	Online-IGOT karmayogi Bharat Portal https://igotkarmayogi.gov.in/ Course offered by National E-Governance Division (NEGD) MeitY Govt of India	March 05, 2026
Sh. Ishant Kashyap Technician-I, PME	Data Analytics and Visualizations for Government Officers	Online-IGOT karmayogi Bharat Portal https://igotkarmayogi.gov.in/ Course offered by Department of Expenditure	March 13, 2026
Ravinder Deekonda	AI4ICPS Certificate Programme Hands-on Approach to AI for Real- world Applications (HAAI) : Cohort 3	IIT Kharagpur (Online)	Feb 08-May 17, 2025

New Facilities / Equipment Procured / Developed

New Facilities / Equipment Procured / Developed

Name of the Division	Name of the Facility / Equipment
Pavement Evaluation Division	Digital Penetrometer
	Thermal Imaging Camera
	Marshall Machine (50 kN)
	Vibratory Hammer
	Marshall Compactor
	Ductility Machine
	Rolling Thin Film Oven
	Indirect Tensile Strength Apparatus
	Automatic Softening Point Apparatus
	Automatic Proctor Compactor (Soil)
	Theoretical Specific Gravity Apparatus
	Drill Machine: Battery Drill Machine

Bridges and
Structures
Division



Blaines Air Permeability Apparatus



Sieve Shaker



Stress Relaxation Testing Machine

	
Geotechnical Engineering Division	Large-scale consolidation apparatus
	Laboratory equipment, such as DIC lights, weights, vane shear etc.
Flexible Pavements Division	Four Point Beam Bending
	Gyratory Compactor
	Pressure Aging Vessel (PAV)
	.
	Rotating Thin Film Oven (RTFO)
Transportation Planning and Environment Division	Photoreactor with NOX analyzer
Traffic Engineering and Safety Division	IVPE, for Vienna Test System New module added in July 2025

Thesis / Dissertation Supervision

Thesis / Dissertation Supervision

Ph.D. SUPERVISION (In Progress as on March 31, 2026)

S.No.	Names of Student	Institute	Title of Project/Thesis	Supervisors
1	Sundar Singh	AcSIR-CRRI	EV Charging network performance evaluation	Dr. Minal Chandra and Dr. Ch. Ravi Sekhar
2	S. Mariappan	AcSIR-CRRI	Development of EV charging application	Dr. Minal Chandra
3	Komal	AcSIR-CRRI	Development of Smog Eating Pavements	Dr Rina Singh and Dr Siksha Swaroopa Kar
4	T. Lakshmi	AcSIR-CRRI	Graphene oxide polymer nanocomposites: self healing and cleaning aspects in bitumen	Dr Rina Singh and Dr Abhishek Mittal
5	S. MegalaMani	AcSIR-CRRI	Travel demand modelling using big data and AI/ML	Dr. Minal Chandra Dr. Ch. Ravi Sekhar
6	Mohini Lashkari	AcSIR-CRRI		Dr. Minal Chandra Dr. Ch. Ravi Sekhar
7	Ayushman Guha	AcSIR-CRRI	A Multidimensional Spectrum of Passenger Travel in Indian Cities	Mukti Advani
8	Khushboo	AcSIR-CRRI	Developing Pattern, Recognition Models for Estimating Vehicle Kilometre Travelled in Rural India	Mukti Advani Sunil Pathak (IIP)
9	Deepak Sharma	AcSIR-CRRI	Motorised Two wheeler Safety	Mukti Advani Deepty Jain (IITD)
10	Farhat Azad	AcSIR-CRRI	Impact of Vehicular Emission on Human Health	Mukti Advani Viren Sardana
11	Anurag Singh	AcSIR-CRRI	–	Mukti Advani Niraj Sharma
12	Maninder Singh	AcSIR-CRRI	Impact of Road Markings on Road Safety	Mukti Advani Richa Ahuja (IIT-Kgp)
13	Varsha Yadav	IIT-Roorkee		Rajat Rastogi Mukti Advani
14	Rinki Roy	AcSIR-CRRI	To be decided	Dr Rina Singh
15	Maheshi Singh			Dr S.Padma

16	Shobit Garg			Dr S.Padma
17	Priyanka Pitaria	AcSIR-CRRI	Plant Species Selection along Highway /Roads for Carbon Sequestration to reduce air pollution	Dr. Ravindra Kumar
18	Ms. Vanshi Dhar	CSIR-CRRI	Economic feasibility of Electric Buses in India	Dr. Ch. Ravisekhar and Dr. Ramesh Ch. Majhi
19	Bishnu Kumar Padhi	AcSIR-CRRI	Development of Maintenance Decision Models for Flexible Pavement	Dr. Pradeep Kumar,
20	Anshul Saxena	AcSIR-CRRI	A Hybrid Sensing and Analytics Approach for Network-Level Road Condition Monitoring	Dr. Pradeep Kumar, and Dr. Hardeo Kumar Thakur, Bennett University, Greater Noida
21	Amresh Kumar	AcSIR-CRRI	FWD Data-Driven Lifecycle Cost Analysis for Optimized Pavement Management	Dr. Pradeep Kumar, and Dr. Tanuj Chopra, Thapar Institute of Engineering & Technology, Patiala
22	Nazia Parvez	AcSIR-CRRI	Performance of reinforced concrete structures under impact load and mitigation with different materials using ABAQUS	Muslim Ansari, CBRI Roorkee and Dr. Vidhi Vyas,
23	Shashank Sonal	AcSIR-CRRI	Life Cycle Assessment of Highways	Dr. Deepa S., CSIR-CRRI and Dr Nivitha M R, PSG college of technology Coimbatore
24	Rajesh Karel	IIT Dhanbad	Deterioration Models for Flexible Pavements	Dr. S. S. Mahapatra, IIT Dhanbad and Dr. Sampath Kumar, CSIR-CRRI
25	Kumar Shashi Bhushan	Delhi Technological University, Delhi	Study of Nature of Ground Waves and Protection of Civil Engineering Structures by Passive Isolation	Dr. Rajeev Goel and Dr. Anil K Sahu (DTU)
26	Neha	NERIST, Arunachal Pradesh	Construction and Demolition Waste - A Viable Source of Coarse Aggregates for Sustainability	Dr. Rajeev Goel and Dr. Sudhist Mishra (NERIST, Arunachal Pradesh)
27	Gaurav Verma	AcSIR-CRRI	Development of low cost natural fibre based composite material for bridge construction	Dr Rajeev Goel and Dr Naveet Kaur
28	Mukesh Vashan	AcSIR-CRRI	Analysis of Bridges under Earthquake	Dr Rajeev Goel and Dr Naveet Kaur
29	Shyam Sundar Choudhary	AcSIR-CRRI	Health assessment of cables of prestressed concrete bridges	Dr. Rajeev Goel
30	Prateek Sharma	AcSIR-CRRI	Structural performance of GFRP reinforced concrete beams	Dr. Rajeev Goel and Dr. Narinder Dev (DTU)
31	Amit Trivedi	AcSIR-CRRI	Mechanical, Durability and Microstructural Properties of GPC made with Multi Blended Materials and Application in Infrastructure	Dr. Rajeev Goel and Dr. Rakesh Kumar

32	Sreenitya Singamsetty	IIT Delhi	Non-rectilinear configuration of piezo sensors for structural health monitoring and energy harvesting	Dr. Naveet Kaur and Prof. Suresh Bhalla (IIT Delhi)
33	Goldi Gupta	AcSIR-CRRI	Corrosion Assessment in real life field conditions	Dr Naveet Kaur and Dr Shweta Goel
34	Naveen Kumar	AcSIR-CRRI	Development of Impact Echo test integrated with customized drone	Dr Naveet Kaur
35	Amit Trivedi	AcSIR-CRRI	Mechanical, Durability and Microstructural properties of GPC made with Multi Blended Materials and Application in Infrastructure	Dr. Rakesh Kumar and Dr. Rajeev Goel
36	R. Umadevi	AcSIR-CRRI	Fatigue Performance Model for the FDR Layer	Dr. G Bharath and Prof. Satish Chandra
37	V K Kanaujia	AcSIR-CRRI	Performance Evaluation of Geosynthetic Reinforced Pavements	Dr. G Bharath and Prof. Nikhil Saboo
38	Gaikwad Siddharth		Laboratory and Field Performance Evaluation of Reinforced Bituminous Pavements	Dr. G Bharath and Prof. Kranthi Kumar
39	Bhavesb Bhambhani	IIT Roorkee	Evaluation of Waste Engine oil residue for partial replacement of conventional bitumen	Prof. Satish Chandra and Dr. G Bharath
40	Sayantana Sasmal	NIT Silchar	Investigation on the performance of biomass modified bio oil in tack coat	Prof. Ambika Kuitiy and Dr. G Bharath
41	Abhishek Kumar	AcSIR-NML	Development of an efficient and sustainable process for recycling construction and demolition waste using gas-solid fluidized bed separator	Dr Ganesh C and Dr. G Bharath
42	Katkar Sarang Sanjay	BITS Pilani	Use of Waste Cooking Oil Modified Bio binders in Bituminous Mix	Prof. Vijay Kakade and Dr. G Bharath
43	MGurunath	Mahindra University, Hyderabad	Performance Characteristics of stabilized base layers with emulsion	Dr. Deepti Avirneni and Dr. G Bharath
44	Anil Pradyumna	CSIR-NML	Performance-Based Evaluation of Bio-Binder Modified Asphalt Mixtures under Rutting and Fatigue Conditions	Dr. G Bharath & Dr. Pankaj Jain
45	Nadeem Khan	CSIR-NML	Fatigue Performance Evaluation of Geosynthetic-Reinforced Asphalt	Dr. S Deepa & Dr G Bharath
46	Suresh Chand Bairwa	Malaviya National Institute of Technology Jaipur	Performance Evaluation of High Modulus Asphalt Mixes Containing Stone Waste	Dr. Pawan Kalla MNIT, Jaipur & Dr. Sarfaraz Ahmed
47	Sandeep Kumar	AcSIR-NPL	Study of Surface Texture Characteristics of Automobile Components used in the Internal Combustion Engine Using Tactile Profilometer	Dr. Mukesh Jewariya, CSIR-NPL, and Dr Parvathi G. S.
48	Pankaj Bhatt	AcSIR-CRRI	Strength and deformation behavior of Municipal Solid Waste in Road Construction	Dr A. K. Sinha, Dr. Parvathi G. S., and Dr. Manojit Samanta, CSIR-CBRI

49	Shivam	AcSIR-CRRI	Geonaturals for ground improvement	Dr Parvathi G. S
50	AkashBharadwaj	AcSIR -CRRI	Landslides– AdvancedModellingTechniques	Dr Parvathi G. S. Pr. Sc., CRRI
51	Rejina Mullappalli	AcSIR -CRRI	Piled Basal reinforcement for ground improvement of soft subsoils	Dr Parvathi G. S. Pr. Sc., CRRI
52	Tarannum Meraj	AcSIR-CRRI	Probabilistic predictive models for Reinforced Soil Walls with marginal fills	Dr Parvathi G. S. Pr. Sc., CRRI
53	Mukesh Kumar	AcSIR-CRRI	Characterization and Performance Study of Natural Fiber-Based Prefabricated Drains	Dr Abijit Chakraborty, Sc., CRRI and Dr. Parvathi G. S., Pr. Sc., CRRI
54	Raushan DUBey	AcSIR-CRRI	Performance of Rock Anchors in Soft Rock Tunnels	Dr Ravi Shankar S. Sr. Sc., CRRI & Dr. Vaibhav Mittal Sc., CRRI
55	Ambrish Saini	AcSIR-CRRI	Nano-Modified Concrete in Rigid Pavement Construction	Dr Ravi Shankar S. Sr. Sc., CRRI
56	Moadassir Alam	AcSIR-CRRI	Distress Mitigation of Reinforced Soil walls	Dr Ravi Shankar S. Sr. Sc., CRRI

M.Tech. - Internships completed during April 2025 to March 2026

S.No	Name	Name of the Division	Name of the Institution / University	Topic	Supervisor
1.	Mr. Abdullahi Osman Abdirahaman	FPD	Galgotias University Uttar Pradesh	Comparative Assessment of Different Airport Pavement Design Methodologies	Dr. Ashish Walia
2.					
3.	Mr. Abhineet Kumar	CCN	Central University of South Bihar Gaya, Bihar	Traffic Signs Detection Using Deep Learning Techniques	Dr. Ch Ravi Sekhar
4.	Mr. Abhishek	TES	National institute of Technology, Tiruchirappalli	Assessment of Speeding Behavior in Delhi	Dr. S. Velmurugan
5.	Mr. Akarshan Jangral	TES	National Institute of Technology, Tiruchirappalli Tamil Nadu	Estimation of Final SOC After a Full Day Operation in Delhi	Dr. Ramesh Chandra Majhi
6.	Mr. Asmin Narayanan	PED	College of Engineering Trivandrum Kerala	Life Cycle Assessment of Highway Pavements Using Simapro	Dr. Deepa S
7.	Mr. Bellani Hari Krishna	FPD	National Institute of Technology, Tiruchirappalli, TamilNadu	Study on High Performance Binder in Sustainable Road Construction	Dr. Sarfaraz Ahmed
8.	Mr. Deepak Sharma	TPE	Indian institute of Technology Kharagpur, West Bengal	Development of ML Model for Road safety index	Dr. Ch. Ravi Sekhar
9.	Mr. Harshith T.K	PED	Resource centre for Asphalt and Soil Training Academy Bangalore, Karnataka	Full Depth Reclamation (FDR) Technology	Sh. Sachin Gowda M.K
10.	Mr. Jeedi Rohit	PED	National Institute of Technology, Trichy, Tiruchirappalli, Tamil Nadu	Design of Airfield Pavements using Faarfield and Bakfaa	Dr. Sampath Kumar
11.	Mr. Lalak Bamdhari	TPE	National Institute of Technology Raipur, Chhattisgarh	Existing Stage Road Safety Audit of Manamunda Kantamal Ghantapada Sindhiguda Road (SH-41) of Odisha State	Dr. Errampalli Madhu
12.	Mr. Liyanthung Ngullie	TPE	Indian Institute of Technology, Kharagpur, West Bengal	Development of Microsimulation Model of Intersection of Shalimar Bagh Intersection	Dr. Ch. Ravi Sekhar
13.	Mr. Mahaveer Jain	TPE	National Institute of Technology Raipur, Chhattisgarh	Traffic Study for Feasibility of Pellet & Steel Transportation Due to Expansion of Konsari Integrated Steel Plant	Dr. Ch. Ravi Sekhar
14.	Mr. Misna	TES	National Institute of Technology, Tiruchirappalli, Tamil Nadu	Econometric and Descriptive Analysis of Charging Infrastructure Requirements and Operational Performance of Battery Electric Buses at Selected Depots in Delhi	Sh. Ramesh Chandra Majhi
15.	Mr. Mohd Sadiq	FPD	Indian institute of Technology Kharagpur	Investigating the Properties of Activated Rubber Modified Binder for Sustainable Pavement Application.	Dr. G. Bharath
16.	Mr. Nachiket Dattatray Gawari	TES	National Institute of Technology, Tiruchirappalli, Tamil Nadu	Road Geometric Effect on Heart Rate Variability	Dr. A. Mohan Rao
17.	Mr. Nihal Nazar	FPD	National Institute of Technology Calicut, Kozhikode	Laboratory Evaluation of EAF Steel Slag in Granular Layers of Flexible Pavements	Sh. Satish Pandey
18.	Mr. Nikhil S L	TES	National Institute of Technology Tiruchirappalli	Vision Based Driver Monitoring System to find the	Dr. A. Mohan Rao

				Driver Distraction or Fatigue Related Behaviour	
19.	Mr. Nikhil Yuvraj Nandavane	TES	National Institute of Technology Tiruchirappalli	Integrated Analysis of Driver Behavior in Urban Traffic Using Driving Simulator, Eye Tracker, and Vienna Test System	Dr. Vinod Karar
20.	Mr. Polamarasetty Naveen	FPD	National Institute of Technology, Tiruchirappalli, Tamil Nadu	Utilization of Processed Steel Slag Aggregates in Dense Bituminous Macadam Layer of Flexible Pavement	Sh. Satish Pandey
21.	Mr. Prasanta Kumar Deuri	TPE	Indian Institute of Technology Kharagpur, West Bengal	Evaluation of Vehicle Actuated Traffic Signals at CRR intersection	Dr. Errampalli Madhu
22.	Mr. Ravulavalasa Santhosh Kumar	TPE	National Institute of Technology Tiruchirappalli Tamil Nadu	Vulnerability Mapping of Meghalaya State Using QGIS Software	Dr. Ravindra Kumar
23.	Mr. Ravulavalasa Santhosh Kumar	TPE	National Institute of Technology, Tiruchirappalli, Tamil Nadu	Vulnerability Mapping of Meghalaya State Using QGIS Software	Dr. Ravindra Kumar
24.	Mr. Rohan Sumbria	ESD	National Institute of Technology Warangal, Telangana	Lane Change detection from steering angle using AI/ ML Algorithm	Dr. Mohan Rao
25.	Mr. Sagar K.R.	PED	Resource centre for Asphalt and Soil Training Academy Bangalore, Karnataka	Full Depth Reclamation (FDR) Technology	Sh. Sachin Gowda M.K
26.	Mr. Sarath R	FPD	National Institute of Technology, Calicut Kozhikode Kerala	Influence of Temperature Variation on the Rutting Performance of CRMB Mixes	Dr. Ashish Walia
27.	Mr. Sariga P P	TES	Indian Institute of Technology Kharagpur, Kharagpur, West Bengal, India	Development of Safety Performance Function for Urban Roads in India	Dr. S.Velmurugan and Dr. Ch. Ravi Sekhar
28.	Mr. Sesetti Swetha	FPD	National Institute of Technology Tiruchirappalli, Tamil Nadu	Investigating the Performance of Activated Rubber	Dr. G. Bharath
29.	Mr. Sreeraj R	PED	College of Engineering Thiruvananthapuram, Kerala	Comparative Study of Cold Mix and Half Warm Mix for SDBC Using its and Dynamic Creep	Dr. Vidhi Vyas
30.	Mr. Subhadeep Das	TPE	Indian Institute of Technology, Kharagpur, West Bengal	Implementation of Hyperloop Corridor Across Mumbai - Bengaluru Route	Dr. Ravindra Kumar
31.	Mr. Utkarsh Mayur	TPE	Indian Institute of Technology, Roorkee	1) Development of Micro-Simulation Models for different ratios of minor to major axis of an elliptical roundabout for Ghodewale Baba Intersection, Kota & 2) Development of Micro-Simulation Models for Business-as-Usual Scenario and Proposed Scenarios for Aerodrome Intersection, Kota	Dr. Ch. Ravi Sekhar
32.	Mr. Vikash Kumar	PME	Indian Institute of Technology Kharagpur	Management Study	Sh. Anshul Saxena
33.	Mr. Vinmrakumar Gupta	TPE	National Institute of Technology Raipur, G.E. Road, Raipur, Chhattisgarh	Existing Stage of Road Safety Audit of Paniganda-Bamunigam- Daringbadi, Road of 47.903 KM.	Dr. Errampalli Madhu
34.	Mr. Vipin Kumar Rawat	TES	National Institute of Technology, Tiruchirappalli	Evaluation of Driver Behaviour on Expressway	Dr. A. Mohan Rao

35.	Mr. Yogeshwar S	GTE	National Institute of Technology Warangal, Telangana	Assessment of Water logging Problems in NH 11 & NH 148 B and Recommendations for Suitable Mitigation Measures	Dr. Ravi Shankar S
36.	Mr. Yogeshwar S	GTE	National Institute of Technology, Warangal	Assessment of Water logging Problems in NH 11 & NH 148 B and Recommendations for Suitable Mitigation Measures	Dr. Ravi Shankar S
37.	Ms. A.P. Prasanthi	PED	College of Engineering Trivandrum Kerala	Life Cycle Assessment of Highway Pavements Using Simapro	Dr. Deepa S
38.	Ms. Aleena K Alavudeen	ESD	College of Engineering Trivandrum Kerala	Evaluation Framework for Multi-dimensional Performance Assessments of Road Corridors	Dr. Mohan Rao
39.	Ms. Amjadha Ameer	PED	College of Engineering Trivandrum Kerala	Laboratory and Field Evaluation of Skid Resistance for Various Contaminants Using BPT and Sand Patch Method	Dr. Sampath Kumar
40.	Ms. Bathula Srija	TES	National Institute of Technology, Tiruchirappalli, Tamil Nadu	Evaluation of Alternative Design Options for Urban Intersection with Heterogeneous Traffic	Sh. Subhash Chand
41.	Ms. Bhavya S	PED	College of Engineering Trivandrum Kerala	Life Cycle Assessment of Highway Pavements Using Simapro	Dr. Deepa S
42.	Ms. Deepika S	PED	College of Engineering Trivandrum, Kerala	Studying The Impact of Vehicle Damage Factor On Pavements Performance and Maintenance Using HDM 4	Dr. Sampath Kumar
43.	Ms. Ganasala Manasa	TPE	National Institute of Technology Tiruchirappalli i, Tamil Nadu	Time Series Analysis of Dwell Time for Determining Congestion Carryover	Dr. S. Padma
44.	Ms. Jyothika Santhosh	ESD	College of Engineering Trivandrum Kerala	Analysis of Pedestrian Vehicle Conflict Using Computer Vision Techniques	Dr. Mohan Rao
45.	Ms. Kadiri Archana	FPD	National Institute of Technology Tiruchirappalli, Tamil Nadu	Burden on Budget to Achieve Net Zero Emissions in Flexible Pavements	Sh. Gagandeep Singh
46.	Ms. Keerthana Sajjai	PED	National Institute of Technology Tiruchirappalli, Tamil Nadu	Investigation of the Mechanical and Durability Properties of Cold Mix Asphalt and Half Warm Mix Asphalt Using SDBC Gradation	Dr. Vidhi Vyas
47.	Ms. Koviri Balaram	TES	Visvesvaraya National Institute of Technology, Nagpur	Analysis of Driver Drowsiness Using Driving Simulator and Vienna Testing System	Dr. Vinod Karar and Smt. Kamini Gupta
48.	Ms. M. Jumana Haseen S	PED	College of Engineering Trivandrum Kerala	Comparative Study of Cold Mix and Half Warm Mix for SDBC Using Marshall Stability and Resilient Modulus	Dr. Vidhi Vyas
49.	Ms. Misna	TES	National Institute of Technology Tiruchirappalli Tamil Nadu	Econometric and Descriptive Analysis of Charging Infrastructure Requirements and Operation Performance of Battery Electric Buses at Selected Depots in Delhi	Sh. Ramesh Chandra Majhi
50.	Ms. Nidhi Rimjhim Minz	TES	National Institute of Technology Tiruchirappalli Tamil Nadu	Detection of Driver Cognitive Distraction using Machine Learning Methods	Dr. A.Mohan Rao

51.	Ms. Nidhi Rimjhim Minz	TES	National Institute of Technology, Tiruchirappalli, Tamil Nadu	Detection of Driver Cognitive Distraction using Machine Learning Methods	Dr. A. Mohan Rao
52.	Ms. Poorvi Patle	TPE	Indian Institute Of Technology Roorkee	Traffic Flow Modelling for EV in Urban Corridors Under Mixed Traffic Condition	Dr. Minal Chandra
53.	Ms. Radhika PM	PED	Mahatma Gandhi University, Kottayam Kerala	Development of Optimised Raveling Prediction Model for Asphalt Pavements Using Gradient Boosting With Genetic Algorithm and SHAP	Dr. Sampath Kumar
54.	Ms. Sakshi Maheshwari	TPE	National Institute of technology, Raipur	Vibration Study for Suggesting Remedial Action for Structural Stability of Ancient Monuments Situated Close to Railway Tracks (Proposed 3rd/4th line, Existing UP & DN Line in Connection with JHS-Bina 3rd Line Project)	Dr. Nasim Akhtar
55.	Ms. Shanti Dengwani	TPE	National Institute of Technology Raipur, Chhattisgarh	Pre-Opening Stage - Road Safety Audit of Dwarka Expressway of Package 1	Dr. Errampalli Madhu
56.	Ms. Shobhana Sahu	TPE	National Institute of Technology, Raipur	Estimation of VKT for Road Freights in India	Dr. Minal Chandra
57.	Ms. Srutakirti Sahoo	GTE	National Institute of Technology, Rourkela, Odisha	Behaviour of Phosphogypsum in Road Construction	Sh. Vijai Kumar Kanaujia, Co-Supervisor - Dr. Anil Kumar Sinha
58.	Ms. T Kavya Priya	TES	Visvesvaraya National Institute of Technology Nagpur	Comparison of Driving Behavior in Urban and Hill Roads Using Simulator and VTS	Smt. Kamini Gupta and Dr. Vinod Karar

M.Sc./M. Plan. - Internship completed during April 2025 to March 2026

S.No	Name	Name of the Division	Name of the Institution / University	Topic	Supervisor
1.	Mr. Abhineet Kumar	CCN	Central University of South Bihar Gaya, Bihar	Helmet Detection Using Advanced Computer Vision	Sh. S. Marriapan
2.	Mr. Devanarayanan N	TPE	Central University of Haryana	A Quantitative Analysis of Travel Patterns and Emissions Among Gig Workers in Delhi NCR	Dr. Mukti Advani
3.	Mr. Dheeraj Kumar	CCN	Central University of South Bihar Gaya, Bihar	Sentiment Analysis of Twitter Data Using NLP Through Machine Learning and Deep Learning Techniques	Sh. Vivek Dubey
4.	Mr. Harsh Vardhan	PME	Birla Institute of Technology And Science - Pilani, Rajasthan	Project Monitoring Dashboard	Sh. D. Ravinder
5.	Mr. Raja Kumar	TPE	Central University of South Bihar Gaya, Bihar	Smart Traffic fine Management System (STFMS): An End- to- End Deep Learning Based Traffic Violation Detection and Notification Framework	Dr. Nasim Akhtar
6.	Mr. Rishab Raj	TPE	Central University of South Bihar Gaya, Bihar	Air Pollution PM2.5 and AI Techniques to Measure it	Dr. Rina Singh
7.	Mr. Rishabh Kumar	PME	Birla Institute of Technology And Science - Pilani, Rajasthan	Comparative Institutional and Financial Analysis of CSIR- CRRRI	Sh. D. Ravinder
8.	Mr. Saquib Sabir	CCN	Central University of South Bihar Gaya, Bihar	Road Pavement Distress Analysis Using Deep Learning Techniques	Dr. Ch Ravi Sekhar
9.	Mr. Sarthak Mishra	TPE	Birla Institute of Technology And Science - Pilani, Rajasthan	Life Cycle Assessment of Diesel, Electric and CNG Buses in Delhi	Dr. Ch. Ravi Sekhar
10.	Mr. Shivansh Gupta	TPE	Birla Institute of Technology And Science Hyderabad	Vibration and its Control Techniques	Dr. Nasim Akhtar
11.	Mr. Sourav Sharma	CCN	Central University of South Bihar Gaya, Bihar	Automatic Vehicle Counting and Classification	Sh. Vivek Dubey
12.	Mr. Yash Sud	CCN	Central University of South Bihar Gaya, Bihar	Road Marking Detection	Dr. Ch Ravi Sekhar
13.	Ms Archiya Kumari	TPE	The Energy and Resources Institute School of Advanced Studies (TERI SAS) Delhi	Multi-Pollutant Correlation and Particulate Ratio Analysis for Source Attribution: A Case Study from Ashram, New Delhi	Dr. Rina Singh
14.	Ms. Adrija Saha	TPE	The Energy and Resources Institute School of Advanced Studies (TERI SAS) Delhi	Estimating Vehicle Kilometres Trsvelled(VKT) and Population-Based Clustering of Indian Cities	Dr. Mukti Advani
15.	Ms. Isha	PME	Indira Gandhi National Open University, New Delhi	GIS and Remote Sensing for Pavement Planning and Monitoring.	Sh. Anshul Saxena
16.	Ms. Nidhi Rawat	TPE	Doon University, Dehradun (Uttarakhand)	Eco- Driving for Emission and Reducing Fuel Consumption in Heavy Duty Vehicles	Dr. Ravindra Kumar

17.	Ms. Poorvi Patle	TPE	Indian Institute Of Technology Roorkee	Traffic Flow Modelling for EV in Urban Corridors Under Mixed Traffic Condition	Dr. Minal Chandra
18.	Ms. Radhika PM	PED	Mahatma Gandhi University, Kottayam Kerala	Development of Optimised Traveling Prediction Model for Asphalt Pavements Using Gradient Boosting With Genetic Algorithm and SHAP	Dr. Sampath Kumar
19.	Ms. Sakshi Kumari	TPE	Doon University, Dehradun	Estimation of vehicular kilometres travelled and vehicular emission from Auto rickshaw	Dr. Mukti Advani

M.Tech - Dissertations completed during April 2025 to March 2026

S.No	Name	Name of the Division	Name of the Institution / University	Topic	Supervisor
1.	Mr. Abhish Raj	TES	Central University of Jharkhand, Cheri-Manatu, Ranchi	Assessment Evaluation and Design of Parking Facilities for Bharatpur City	Sh. Subhash Chand
2.	Mr. Akshansh Sharma	PED	National Institute of Technology Kurukshetra, Haryana	Analysis of Thin White Topping of Pavement using FWD and ABAQUS Software	Dr. Sampath Kumar Pasupunuri
3.	Mr. Akshay Yadav	TPE	National Institute of Technology Kurukshetra, Haryana	VKT Based Emission Estimation for Intercity Bus and Rural Community	Dr. Mukti Advani
4.	Mr. Aman Kumar	FPD	Central University of Jharkhand	Laboratory Study on the Effect of Short- Term Aging on Viscosity Grade Bitumen	Dr. Abhishek Mittal
5.	Mr. Aman Rusiya	TES	Maulana Azad National Institute of Technology	Development of Safety Performance for Urban Intersection: A Case Study of Bharatpur	Dr. S Velumurgan
6.	Mr. Aryan Kumar	TPE	Indian Institute Of Technology Delhi (IIT Delhi)	Estimation of Vehicular Emissions Using COPERT Model: A Case Study of Delhi	Dr. Niraj Sharma and DR. Mukti Advani
7.	Mr. Aryan Lamba	FPD	Thapar Institute of Engineering & Technology Patiala, Punjab	Performance Evaluation of FDR Base Layers with Soils of Varying Plasticity Index	Dr. Gottumukkala Bharath
8.	Mr. Ashwani Saini	RPD	Deenbandhu Chhotu Ram University of Science and Technology, Murthal (Haryana)	Utilization of Reclaimed Asphalt Pavement (RAP) in Paving Grade Concrete for use in Concrete Road Construction	Sh. Romeil Sagwal
9.	Mr. Deepdev	TPE	Central University of Jharkhand	Parameter-Based Reclassification of Indian Road s- A Case Study on Meghalaya	Dr. Ravindra Kumar
10.	Mr. Gandem Amartya Kartheek	FPD	Rajiv Gandhi University of Knowledge and Technology, Nuzvid, Andhra Pradesh	Characterization and Evaluation of Biochar- Modified Bitumen for use in Bituminous Concrete Mixes	Dr. Gottumukkala Bharath
11.	Mr. Harsh Vardhan Gautam	TES	Malaviya National Institute of Technology Jaipur	Evaluating the Effect of Glare from Approaching Vehicle on the Visibility of Behind - Traffic Sign Boards	Dr. Vinod Karar & Mrs. Kamini Gupta
12.	Mr. Ishant Purohit	FPD	Thapar Institute of Engineering & Technology, Patiala Punjab	Design of Cement Grouted Bitumen Mix Using Bitumen Emulsion	Sh. Manoj Kumar Shukla
13.	Mr. Jayant Kumar Mandal	PED	Maulana Azad National Institute of Technology	Evaluation of Economic Benefits Using Pavement Management System using HDM-4	Dr. Aakash Gupta
14.	Mr. Kalava Lakshman Sai	FPD	Rajiv Gandhi University of Knowledge and Technology, Nuzvid, Andhra Pradesh	Influence of Cement Addition Method (Wet/Dry) and Degree of Compaction on the Performance Characteristics of Full Depth Reclamation (FDR) Mixes	Dr. Gottumukkala Bharath
15.	Mr. Kapil Tanwar	GE	National Institute of Technology Kurukshetra, Haryana	Response Analysis of Pavements Constructed with Marginal Material Under Cyclic Load	Dr. Ravi Shankar S
16.	Mr. Mehakdeep Singh	FPD	Thapar Institute of Engineering & Technology Patiala, Punjab	Laboratory Test on Plastic Waste Modified Bitumen Emulsion	Dr. Siksha Swaroopa Kar
17.	Mr. Nadeem Khan	RPD	The Maharaja Sayajirao University of Baroda, Gujarat	Development of Ultra High Performance Concrete	Dr. Rakesh Kumar
18.	Mr. Nirav Nishit	FPD	Thapar Institute of Engineering & Technology Patiala, Punjab	Evaluation of Bio- Oil to be used as a Bitumen Rejuvenator	Dr. Abhishek Mittal

19.	Mr. Pradeep Kumar N K V	FPD	University of Visvesvaraya College of Engineering, Bengaluru	Experimental Study of High Performance Bituminous Mixtures Containing Reclaimed Asphalt Pavement Material	Dr. Sarfaraz Ahmed
20.	Mr. Prashant Kumar	FPD	Deenbandhu Chhotu Ram University of Science and Technology Murthal, Haryana	Addition of Recycled Fibre Glass in Bituminous Concrete	Sh. Gagandeep Singh
21.	Mr. Rajan Pailleshbhai Tank	PED	The Maharaja Sayajirao University of Baroda	Fatigue Behaviour of Full Depth Reclamation (FDR) Mixes Stabilized with Cement and Emulsion	Dr. Deepa
22.	Mr. Rishabh	TES	Central University of Jharkhand	To Study the Effect of Glare and Stray Lights on Drivers at Intersection	Dr. Vinod Karar
23.	Mr. Sainath M Patil	TES	University of Visvesvaraya College of Engineering, Bengaluru	Comparative Benefit- Cost Ratio Analysis of Blackspot Treatment Based on Recommendation of Road Safety Audit (RSA) And International Road Assessment Programme (iRAP)	Sh. Subhash Chand
24.	Mr. Shakil Alam	TPE	Central University of Jharkhand	Investigation of Crash's Record in Compliance with IRC and an Identification of Black Spots-A Case Study of Nagpur	Dr. S. Padma
25.	Mr. Shreyas MC	PED	Siddaganga Institute of Technology, Tumkur Karnataka	Evaluating Rutting Susceptibility of Asphalt Mixtures : Impact of Aggregate Gradation, Binder Selection, Temperature and Stress Levels	Sh. Sachin Gowda MK
26.	Mr. Souvik Das	BES	Birla Institute of Technology and Science Pilani, Pilani Campus	Natural Frequency of Bridges	Dr. Pardeep Kumar & Dr. Naveet Kaur
27.	Mr. Suman Kumar	GE	Central University of Jharkhand	Static Characterisation of Zinc Tailing Waste Material	Dr. A. Kumar Sinha
28.	Mr. Surjeet Singh	PED	National Institute of Technology Kurukshetra, Haryana	Benchmarking Falling Weight Deflectometer Deflection Bowl Parameters for Indian Roads	Dr. Vidhi Vyas
29.	Mr. Surjeet Singh	PED	National Institute of Technology, Kurukshetra Haryana	Benchmarking Falling weight Deflectometer Deflection Bowl parameters for Indian Roads	Dr. Vidhi Vyas
30.	Ms. Anshika Gupta	TES	Maulana Azad National Institute of Technology, Bhopal, Madhya Pradesh	Analysing Driving Performance Metrics and Demographic Factors in a Simulation Environment	Ms. Kamini Gupta & Dr. Vinod Karar
31.	Ms. Athira Venu	TPE	Central University of Haryana, Mohendergarh	3D Noise Mapping and Zone Based Analysis for Identification of Noise Pollution Hotspot and Mitigation Strategies for Control of Noise Pollution: Special Reference to Ahmedabad, Surat, Vadodara, Rajkot (Gujrat)	Dr. Nasim Akthar
32.	Ms. Harshitha R	TES	University of Visvesraya College of Engineering, Dept of Civil Engineering, Jnanabharathi campus, Bangalore	Development of Safety Performance Functions for Indian Highways	Dr. A. Mohan Rao
33.	Ms. Khushi Joshi	TES	Malaviya National Institute of Technology Jaipur	Sensor- Based Investigation of Sun Glare Intensity and Its Effects on Driver Visual Perception : A Comparative Study Across Day Timings With and Without Sun Visors	Dr. Vinod Karar & Mrs. Kamini Gupta
34.	Ms. Krishna S Kumar	TPE	Central University of Harayana	Identification of Hot Spots and Zone Based Analysis 3d Noise Mapping and Mitigation plan for Control of Noise Pollution for Jodhpur, Jaipur Kota (Rajasthan)	Dr. Nasim Akthar

35.	Ms. Muskan Prajapat	TES	Malaviya National Institute of Technology Jaipur	Smart Assessment of Driver Response and Crash Risk Via Vienna Testing System and Simulation	Dr. Vinod Karar & Mrs. Kamini Gupta
36.	Ms. Neha B V	TPE	University of Visvesvaraya College of Engineering Bangalore	Investment Decision Planning in road network using database hi	Dr. Ravindra Kumar
37.	Ms. Shreyas M C	PED	Siddaganga Institute of Technology, Tumkur, Karnataka	Evaluating Rutting Susceptibility of Asphalt Mixtures: Impact of Aggregate Gradation, Binder Selection, Temperature and Stress Levels	Sh. Sachin Gowda M K
38.	Ms. Sneha D.M	FPD	University of Visvesvaraya College of Engineering, Jnana Bharathi, Bengaluru	Influence of Reinforcement on Cracking and Rutting Performance of Bituminous Concrete Mixes	Dr. G. Bharath

M.Sc.- Dissertations completed during April 2025 to March 2026					
S.No	Name	Name of the Division	Name of the Institution / University	Topic	Supervisor
1.	Ms. Athira Venu	TPE	Central University of Haryana, Mohendergarh	3D Noise Mapping and Zone Based Analysis for Identification of Noise Pollution Hotspot and Mitigation Strategies for Control of Noise Pollution: Special Reference to Ahmedabad, Surat, Vadodara, Rajkot (Gujrat)	Dr. Nasim Akthar
2.	Ms. Diksha Dhillon	TPE	Banasthali Vidyapith, Tonk, Rajasthan	Modular Computer Vision Based Vehicle Trajectory and Queue Length Analysis System	Dr. Errampalli Madhu
3.	Ms. Krishna S Kumar	TPE	Central University of Harayana	Identification of Hot Spots and Zone Based Analysis 3d Noise Mapping and Mitigation plan for Control of Noise Pollution for Jodhpur, Jaipur Kota (Rajsathan)	Dr. Nasim Akthar

B.Tech Internship completed during April 2025 to march 2026						
S.No.	Name	Course	College Name	Topic	Division	Supervisor
1	Mr. Abhishek Singh	B. Tech	Indian Institute of Technology Jodhpur (IIT Jodhpur)	Characterization of Unbound Pavement Material using Mechanistic Method	FPD	Dr. Ashish Walia
2	Mr. Abhaas Srivastava	B. E.	Birla Institute of Technology and Science Pilani, Rajasthan	Examine the Freight Characteristics in Udaipur City	CCN	Dr. Ch. Ravi Sekhar
3	Mr. Abhijeet Beniwal	B. Tech	Birla Institute of Technology and Science Pilani, Rajasthan	Evaluation of Anand Vihar Railway Terminal as A Multimodal Hub	TPE	Dr. Mukti Advani
4	Mr. Abhijeet Hooda	B. Tech	Birla Institute of Technology and Science Pilani, Rajasthan	Website for ILT Division	ILT	Mrs. Kamla Masih
5	Mr. Abhishek Kumar Jha	B. Tech	Delhi Technical Campus Greater Noida	Real-Time Driver's Activity Detection System	CCN	Mrs. Reeta Kukreja
6	Mr. Abhishek Kumar Singh	B. Tech	Delhi Technological University, Delhi	Analyzing Pedestrian Exposure to Suspended Particulate Matter in Selected Region of New Delhi	TPE	Dr. Ravindra kumar
7	Mr. Abhishek Yadav	B. Tech	IMs. Engineering College Ghaziabad	Web Scrapping tool	CCN	Sh.Vivek Dubey
8	Mr. Aditya	B. Tech	Delhi Technological University, Delhi	Effect Of GGBS as a Mineral Filler in Microsurfacing Mix	FPD	Dr. Rajiv Kumar
9	Mr. Aditya Jha	B. Tech	Delhi Technological University, Delhi	Non-Destructive Techniques(NDT)& Their Uses to Evaluate the Concrete Quality of Highway Structures	BES	Sh. Rajesh Rana
10	Mr. Aditya Jorwal	B. Tech	Delhi Technological University, Delhi	Assessment of Reinforced and Unreinforced Pavements Utilizing C&D Waste and Geosynthetics	GTE	Dr. Ravi Shankar S
11	Mr. Aditya Kumar	B. Tech	Delhi Technological University, Delhi	Open Graded Friction Course(OGFC),Resilient Modulus and Creep Effect	FPD	Dr. Rajiv Kumar
12	Mr. Aditya Nema	B. E.	Birla Institute of Technology and Science, Pilani	Stock Price Prediction and Web Application using k-NN	CCN	Sh. S.Mariappan
13	Mr. Aditya Priyadarshi	B. Tech	Birla Institute of Technology and Science Pilani	Passenger travel Characteristics of Udaipur City	CCN	Dr. Ch. Ravi Sekhar
14	Mr. Aditya Srivastava	B. Tech	IMs. Engineering College Adhyatmik Nagar Ghaziabad	Canteen Management System	CCN	Smt. Reeta Kukreja
15	Mr. Adnan Sheikh	B. Tech	Amity University, Lucknow	Development of Application of Image Detection Using Python	CCN	Sh. S. Mariappan
16	Mr. Afeef Hashmi	B.Tech.	Jamia Milla Islamia	Design of Minor Road Junction using Auto Cad	TES	Sh. Subhash Chand

17	Mr. Agrim Kumar	B. Tech	Birla Institute of Technology and Science - Goa Campus	A Proactive Sensing Framework for Pedestrian Risk Mitigation Using ADAS Telemetry	TPE	Dr. S Padma
18	Mr. Akshat Kumar	B. Tech	Birla Institute of Technology And Science - Pilani, Hyderabad Campus	UrbanSpeed Tool and Advance Accident Prediction System.	CCN	Dr. Ch. Ravi Sekhar
19	Mr. Anagh Kaushik	B. Tech	Birla Institute of Technology And Science Pilani,Rajasthan	LCCA OF diesel and electric buses	TPE	Dr. Ch. Ravi Sekhar
20	Mr. Anand Kumar	B. Tech	RV College of Engineering.Mysore Rd, RV Vidyaniketan, Post, Bengaluru, Karnataka	Traffic Analysis Of Ajmer City	TPE	Dr. E.Madhu
21	Mr. Animesh Krishna Tiwari	B.E.	Birla Institute of Technology and Science, Pilani	Traffic Signal Designing for Udaipur City	CCN	Dr.Ch. Ravi Sekhar
22	Mr. Ansh Verma	B. Tech	GLA University, Mathura (U.P)	Congestion Index Prediction and Optimum Speed Estimation for Urban Expressways (India)	CCN	Sh. S. Mariappan
23	Mr. Anshuman Yadav	B. Tech	Dayalbagh Educational Institute, Agra, Uttar Pradesh	Spatial Analysis of Connected and Unconnected Villages and Roads Using QGIS	TPE	Dr. Ravindra Kumar
24	Mr. Arnav Gupta	B. Tech	BITS Pilani Goa campus, Goa Campus	Noise Emissions in Vehicles	TPE	Dr. Nasim Akhtar
25	Mr. Aryan Goyal	B. Tech	Birla institute of Technology and Science, Zaurinagar Goa	Real Time Text Editor	CCN	Sh. Muzahid Hussain
26	Mr. Aryan Shende	B. Tech	National Institute of Technology, Goa	PCU Estimation and Capacity Analysis for Two-Lane of Interurban Corridor in India	TPE	Dr. Ch. Ravi Sekhar
27	Mr. Ashish Singh Kausal	B. Tech	Dayalbagh Educational Institute, Agra	Traffic Flow Behaviour Using Vissim Software	TPE	Dr. Ch. Ravi Sekhar
28	Mr. Atul Ajay Singh	B. E.	Birla Institute Of Technology and Science Pilani , 333031	To study the freight characteristics of Ajmer	TPE	Dr Errampalli Madhu
29	Mr. Aviralshrey Agarwal	B. Tech	Birla Institute of Technology and Science (BITS), Pilani Campus, Vidya Vihar, Pilani, Rajasthan 333031	Pedestrian traffic analysis for Udaipur City	TPE	Dr. Ch. Ravi Sekhar
30	Mr. Ayush	B. Tech	Punjab Engineering College	Developing a rural accessibility index for hilly areas	TPE	Dr. Ravindra Kumar
31	Mr. Ayush Bhushan	B. Tech	National Institute of Technology Sikkim	Optimisation of Speed Limit Based on Speed Ratio and Violation for Inter Urban Roads in India	TPE	Dr. Ch. Ravi Sekhar
32	Mr. Ayush Kumar	B.Tech.	RVIT -Engineering and Pharmacy College, Bijnor, Uttar Pradesh	End-to-End Proposal Management	PME	Shri D. Ravinder

33	Mr. Bablu Chaudhary	B. Tech	BSA College of Engineering and Technology, Mathura	Transportation Engineering Material Testing	FPD	Sh. C. Kamaraj
34	Mr. Balajee Kanhaiya	B. Tech	National Institute of Technology Meghalaya	Investigation on Use of C&D Waste for Road Construction with and without Geotextile	GTE	Dr. Ravi Shankar S
35	Mr. Brijesh Anand	B. Tech	Shree Guru Gobind Singh Tricentenary University ,Budheda , Gurugram, Haryana	Evaluation of Aggregate and Binder Properties for Pavement Materials as per IS Standards	FPD	Dr. Rajiv Kumar
36	Mr. Chetan Agarwal	B.Tech.	Dayalbagh Educational Institute, Agra	Geotechnical Investigation of Delhi Silt for Road Construction	GTE	Sh. Rohit Chamoli
37	Mr. Deepayan Mukherjee	B. E.	Birla Institute of Technology and Science, Pilani, Rajasthan	UrbanSpeed: An Analytical and Statistics Driven Approach for Speed Limit Optimization Using Accident Data	CCN	Dr. Ch. Ravi Sekhar
38	Mr. Dev Makan	B.Tech.	Birla Institute of Technology & Sciences	Full Stack Application Development for Database Management System	PME	Shri D. Ravinder
39	Mr. Devansh	B. Tech	Birla Institute of Technology and Sciences, Pilani	STUDY THE PARKING CHARACTERISTICS OF UDAIPUR CITY	CCN	Dr. Ch. Ravi Sekhar
40	Mr. Dhanush V	B. Tech	The National Institute of Engineering/Mysore	Experimental Investigation on High Performance Binder for Sustainable Pavement de Design	FPD	Dr.Sarfaraz Ahmed
41	Mr. Dheshanth RG	B. Tech	Shiv Nadar University, Greater Noida, Uttar Pradesh	Failure of Bridges due to Fire Across the World	BES	Dr. Pardeep Kumar
42	Mr. Divyansh Bhabar	B. Tech	Madhav Institute of Technology and Science, Madhya Pradesh	Material Testing & Pavement Design	FPD	Sh. Satish Pandey
43	Mr. Gaurav Chaudhary	B. Tech	B.S.A College Of Engineering & Technology, Mathura	Comparative Evaluation Of Physical Properties Of VG 30, VG 40, and Crumb Rubber Modified Bitumen.	FPD	Dr. G Bharath
44	Mr. Gunjesh Kumar	B. Tech	Gayatri Vidya Parishad College of Engineering (Autonomous)	Road Safety Scoring System	CCN	Dr. Chalumuri Ravi Sekhar
45	Mr. Harsh Srivastava	B. Tech	IMS. Engineering College, Ghaziabad	Forecasting PM2.5 Concentration using Machine Learning and Deep Learning Techniques (Python – LSTM, Decision Tree, Linear Regression)	CCN	Sh. S. Mariappan
46	Mr. Himanshu Kumar Kamlesh	B.Tech.	National Institute of Technology, Goa	Feasibility Study: Graphene Oxide Nanoparticles for Durable and Economical Road Construction	TPE	Dr. Rina Singh
47	Mr. Inzemamul Haque	B. Tech	Delhi Technological University, Delhi	Studies on Pedestrian Exposure to Suspended Particulate Matter in Selected Region of New Delhi	TPE	Dr. Ravindra Kumar
48	Mr. Ishitv Sharma	B. E.	Birla Institute of Technology and Sciences, Pilani, Rajasthan	Design of Floating Chambers	TPE	Dr. Nasim Akhtar
49	Mr. K Hari Charan	B. Tech	National Institute Of Technology Warangal, Telangana.	Geotechnical Properties of Refuse Waste Materials	GTE	Dr. Ravi Shankar S
50	Mr. Kanik Kumar	B. Tech	Birla Institute of Technology and Sciences , Pilani, Rajasthan	Design and Development of Web Based Vehicle Intent Automation System for CRR	CCN	Sh. S. Mariappan
51	Mr. Kanishk Sharma	B.Tech.	Birla Institute of Technology and Science, Pilani	Studying the Effect of Concentration of Rubber in Bitumen	FPD	Dr. Gottumukkal a Bharath

52	Mr. Kartikeya Kulhari	B. Tech	Indian Institute of Technology BHU, Varanasi	Traffic Vulnerability Analysis Under Flood Scenarios	TES	Sh. Ramesh Chandra Majhi
53	Mr. Krish Patel	B. E.	Leelaben Dashrathbhai Ramdas Patel Institute of Technology and Research	Road Distress Measurement Tool	PED	Dr. Neelam Jain Gupta
54	Mr. Kunchem Narendra	B. Tech	Vallurupalli Nageswara Rao Vignana Jyothi Institute of Engineering & Technology College in Hyderabad	Study of Effect of Gradation on Volumetric Properties of Bituminous Mix	FPD	Sh. Gagandeep Singh
55	Mr. Majji Tejeswar Rao	B. Tech	Gayatri Vidya Parishad College Of Engineering	Road Safety Scoring System	CCN	Dr.Ch.Ravi Sekhar
56	Mr. Manan Choudhary	B. E.	Birla Institute of Technology and Science, Pilani	Traffic Management and Infrastructure Improvement Plan for Gaur City Intersection, Greater Noida	TES	Dr. Ramesh Majhi
57	Mr. Manikanta Sai Myaka	B. Tech	Vallurupalli Nageswarao Vignana Jyothi Institute of Engineering and Technology, Bachupally, Hyderabad	Behaviour of Foundry Sand Mix with Soil	GTE	Sh. Vijai Kumar Kanaujia
58	Mr. Mazhar Khan	B.Tech.	J.C Bose University of Science and Technology, YMCA, Faridabad	Health Monitoring of Bridge Structure Through Instrumentation	BES	Dr. G. K. Sahu
59	Mr. Md Farhan	B. Tech	Delhi Technological University, Delhi	Spatio-Temporal Analysis of PM2.5 Concentration in Traffic-Dense and Hilly Zones of Delhi using GIS	TPE	Dr. Rina Singh
60	Mr. Md Sanouar	B. E.	Sant Longowal Institute of Engineering and Technology Longowal Sangrur Punjab	CRRI Transport System	CCN	Sh. Vivek Dubey
61	Mr. Mehar Devnani	B. E.	Birla Institute of Technology and Science, Pilani, Rajasthan	Estimating Travel Demand for Tourists of Udaipur City	CCN	Dr. Ch. Ravi Sekhar
62	Mr. Mohammad Taqi	B. Tech	Integral University, Lucknow, Uttar Pradesh	The Study of Driver's Behaviour In Terms. Of Distraction Using Driving Simulator	TES	Dr. Vinod Karar
63	Mr. Mohd Ashad	B.Tech.	BITS Pilani K K Birla, Goa	Movie Recommender System	CCN	Sh. Muzahid Hussain
64	Mr. Nagidi Srinivas	B. Tech	Sagi Rama Krishnam Raju Engineering College Engineering College, Andhra Pradesh	Determination of Pavement Condition Index	PED	Dr. Aakash Gupta
65	Mr. Namish Chhabra	Integrated B. Tech and M.sc	Birla Institute of Technology and Science Pilani, Rajasthan	Website Infrastructure for ILT division	ILT	Smt. Kamla Masih
66	Mr. Nanchari Akhil	B.Tech.	Vallurupalli Nageswara Rao Vignana Jyothi Institute of Engineering and Technology, Bachupally, Hyderabad,	Geo Technical Investigation of Dausa Rajasthan Soil	GTE	Sh. Rohit Chamoli,
67	Mr. Nigamananda Behera	B. Tech	B.S.A. College of Engineering and Technology, Mathura, Uttar Pradesh	Characteristics of Cement Emulsified Asphalt Mortar (CEAM) Using Different Bitumen Emulsions	FPD	Sh. Manoj Kumar Shukla
68	Mr. Paila Murali	B.Tech.	Gayatri Vidya Parishad College	Road Safety Scoring System	TPE	Dr. Chalumuri Ravi Sekhar
69	Mr. Penta Sarath Chandra	B. Tech	GITAM (Deemed to be University) Visakhapatnam, Andhra Pradesh	Solving Flooding in Transportation Using Network Centrality	TES	Dr. Ramesh Chandra Majhi
71	Mr. Pratyush Anand	B. E.	Birla Institute of Technology and Sciences, Pilani, Rajasthan	Computer Vision-Based Vehicle Detection, Speed Estimation, Traffic Violation Analysis and Environmental Impact Assessment Using Machine Learning	CCN	Sh. Vivek Dubey

72	Mr. Pulkit Garg	B. Tech	Birla Institute Of Technology And Sciences , Pilani	THE PEDESTRIAN CHARACTERISTICS OF UDAIPUR CITY	CCN	Dr. Ch . Ravi sekhar
73	Mr. Raj Kumar	B. Tech	BSA College of Engineering and Technology Mathura,U.P	Performance Evaluation of Bitumen Mixes Induced with the Polymer for Flexible Pavement	FPD	Dr. Sarfaraz Ahmed
74	Mr. Rajvardhan Singh	B. Tech	Delhi Technological University, Delhi	Evaluation of Waterproofing Membrane and its Effect on Durability of Bridge Deck	BES	Sh. Rajesh Rana
75	Mr. Ranvijay Tanwar	B. E.	Birla Institute of Technology and Science, Pilani, Rajasthan	UrbanSpeed : An Analytical and Statistics Driven Approach for Speed Limit Optimization Using Accident Data	CCN	Dr. Ch. Ravi Sekhar
76	Mr. Ratul Chanana	B.Tech.	Birla Institute of Technology and Science, Pilani	Vehicle Indent Management System	CCN	Sh S. Mariappa
77	Mr. Rohan Vashishth	B.E.	Birla Institute of Technology & Sciences, BITS, Pilani, Rajasthan	Type of Crash Prediction using AI/ML	CCN	Sh. Vivek Dubey
78	Mr. Romy Mathew	B. Tech	Saintgits College of Engineering, Kerala	Eye-Tracking Based Analysis of Driver Distraction Patterns in Urban Environments – A Delhi Study	TES	Dr. Vinod Karar
79	Mr. Rushil Joshi	B. E.	Birla institute of Technology and Science Pilani Rajasthan	Road Accident Data Analysis of city of Udaipur	CCN	Dr Ch. Ravi Sekhar
80	Mr. Sainitesh Chunchu	B.Tech.	National Institute of Technology, Goa	Enhancing Road Safety Measures around Dev Samaj Modern School	TPE	Dr. Mukti Advani
81	Mr. Saurav Kumar	B. Tech	Dayalbagh educational institute (dayalbagh agra)	Geotechnical characterization of soil	GTE	Sh. Vijai Kumar Kanaujiya
82	Mr. Shantanu yadav	B. Tech	BSA College Of Engineering and Technology, Mathura	Mix Design of High Dosage Crumb Rubber Bituminous Mixes	FPD	Sh. Gajendra Kumar
83	Mr. Shiva Bhargav Emmadi	B.Tech.	yothei Institute of Engineering & Technology College Hyderabad	Laboratory Evaluation Of Bituminous Mixes Incorporating Dry-Mixed Polymers For Flexible Pavements	FPD	Dr. Gottumukkal a Bharath
84	Mr. Shreshth Singh	B. Tech	Central University of Haryana Mahendragrah .	Demulsification and Characterization of Cement Emulsion Mortar	FPD	Dr. Siksha Swaroopakar
85	Mr. Siddharth Kakar	B.Tech.	Birla Institute of Technology and Science, Pilani	Study of Natural Frequency of Bridges	BES	Dr. Naveet Kaur
86	Mr. Somveer Singh	B. Tech	RV Institute of Technology,Bijnor	Road Defects Reporting Android App	CCN	Sh. Vivek Dubey
87	Mr. Sparsh Mathur	B. E.	Bits Pilani vidyavihar Pilani Rajasthan	Traffic Volume Analysis of Udaipur City	CCN	Dr. Ch. Ravi Sekhar
88	Mr. Sudhanshu Pandey	B. Tech	Raj Kumar Goel Institute of Technology and Management,Ghaziabad	HIGHCOMP : A Web based Platform for Highway construction Analysis and Calculation	FPD	Dr. Rajiv Kumar
89	Mr. Sujal Chopra	B.Tech.	BITS Pilani	Data Analytics Project on Road Crashes in Bharatpur, India	CCN	Sh S. Mariappan
90	Ms. Supriya Chattopadhyay	B. Tech	Manipal University Jaipur	Investigating The Impact of Flooding on the Road Transportation Network in the Mahanadi River Basin, Odisha	TES	Dr. Ramesh Chandra Majhi
91	Mr. Suthar Samarth Kiritkumar	B. E.	Vidush Somany Institute of Technology And Research	Website for Measurement of Road Distress	PED	Guide: Dr. Neelam Jain Gupta Co-Guide:

						Dr. Pradeep Kumar
92	Mr. Syed Azlan Abbas	B.Tech.	Integral University, Lucknow, Uttar Pradesh	The Study of Driver's Behaviour in TerMs. of Distraction Using Driving Simulator	PME	Dr. Vinod Karar,
93	Mr. T Sai Pavan	B.Tech.	Vallurupalli Nageswara Rao Vignana Jyothi Institute of Engineering and Technology, Bachupally, Hyderabad,	Assessment of Ultrafine PM1 Concentrations Using GRIMM 11-D: A Comparative Study of High and Low Traffic Environments	TPE	Dr. Rina Singh
94	Mr. V. Hitheshwara Raju	B. Tech	SRM University AP, Andhra Pradesh	Laboratory Investigation on Polymer-Coated Aggregates in Dense Bituminous Mixes	FPD	Dr. G. Bharath
95	Mr. Vaibhav Gupta	B. Tech	Central University of Haryana	Investigating Road Detritus Effects on Skid Resistance of Polished and Unpolished Pavement Aggregates	PED	Dr. Sampath Kumar Pasupunuri
96	Mr. Vanpariya Palak Govindbhai	B. E.	L.D.R.P. - Institute of Technology and Research, Gandhinagar, Gujarat	Developing Query Tool for Vehicle Registration in Indian Cities	TPE	Dr. Mukti Advani
97	Mr. Vijay Kumar Udhani	B. E.	Birla Institute of technology and science pilani	Design of Vibration Control Techniques in Buildings	TPE	Dr. Nasim Akhtar
98	Mr. Yash Choudhary	B. Tech	Birla Institute of Technology and Science Pilani, Hyderabad	Traffic Signal Design in Udaipur City	TPE	Dr. Ch. Ravi Shekhar
99	Mr. Yash Kumar Jha	B. Tech	Delhi Technological University, Delhi,	Improving Road Drainage and Failure Prevention in Extreme Rainfall Regions of Meghalaya	TPE	Dr. Ravindra Kumar
100	Ms. Akshita Jarwal	B.Tech.	Indian Government Engineering College, Jaipur,	Understanding the Latest Trends in Sustainable Mobility Around the Globe	TPE	Dr. Minal Chandra
101	Ms. Anagha B Gopal	B. Tech	Saintgits College of Engineering, Kerala	Evaluation of Airport Pavement through HWD	FPD	Dr. Ashish Walia
102	Ms. Anjali Kashyap	B. Tech	Guru Jambheshwar University of Science and Technology, hisar, haryana	Job Card Management System	CCN	Sh. Prakash Singh
103	Ms. Anjali Kumari	B.Tech.	Sant Longowal Institute of Engineering and Technology, Longowal, Sangrur	Chemical Characterization and Application of Waste Plastic	FPD	Dr. Rajiv Kumar
104	Ms. Anjali Shukla	B. Tech	B.S.A. College Of Engineering And Technology, Mathura	Spot Speed Data Analysis using Python Program	CCN	Dr. Ch. Ravi Sekhar
105	Ms. Anjali Singh	B. Tech	B.S.A College of Engineering And Technology , Mathura	Traffic Data Analysis Using Python Programming	CCN	Dr.Ch Ravi Sekhar
106	Ms. Anjana S Lal	B.Tech.	Saintgits College of Engineering, Kerala	Laboratory Investigation and Mix Design of Warm Mix Asphalt	FPD	Dr. Rajiv Kumar
107	Ms. Ankita Rani	B. Tech	Central University of Haryana	Study of healing effect in bituminous mixtures using microwave heating	PED	Dr. Sampath Kumar P.
108	Ms. Anveshika Tripathi	B.Tech.	Birla Institute of Technology & Sciences	Heart Disease Detector	CCN	Sh. Vivek Dubey
109	Ms. Arni Agarwal	B. Tech	Hitech Institute of Engineering and Technology, Ghaziabad, Uttar Pradesh	Development of Website for Staff Quarter Allotment	CCN	Sh. S. Mariappan
110	Ms. Arpita Singh	B. Tech	IMS. Engineering College Aadhyatikm Nagar Ghaziabad	Development of Traffic Prediction Application	CCN	Sh. S. Mariappan
111	Ms. Arpna Satya	B. Tech	Central University of Haryana	Evaluation of Crack Resistance in BC Bituminous Mix Incorporating ISF Slag Using SCB Apparatus	PED	Dr. Aakash Gupta

112	Ms. Avni Bhardwaj	B. Tech	Delhi Technological University, Delhi	Feasibility of Using Air Pressure Sensor for Scour Monitoring	BES	Dr. Naveet Kaur
113	Ms. Bhavika Arora	B. Tech	Banasthali Vidyapith, Banasthali, Rajasthan, India	Study of Transparent See-Through Displays With Automotive User Interfaces	TES	Dr. Vinod karar
114	Ms. Bhavya Choudhary	B. Tech	Birla Institute of Technology and Science Pilani	Traffic Signal Designing of Udaipur City	TPE	Dr. Ch. Ravi Shekhar
115	Ms. Chhavi Sagar	B. Tech	Guru Jambheshwar University of Science and Technology, Hisar, Haryana	Smart Canteen Management System	CCN	Mrs Reeta Kukreja
116	Ms. Divya	B. Tech	Guru Jambheshwar University of Science and Technology, Hisar, Haryana	Glass fiber reinforced polymer bar	BES	Dr. Pardeep kumar
117	Ms. Diya Chaudhary	B. Tech	Banasthali Vidyapith, Rajasthan	Study of Effects of Granulated Modified Rubber on Bitumen	FPD	Dr. G. Bharath
118	Ms. Drashti Gosai	B.Tech.	Institute of Technology Nirma University	Steel And Iron Slag Based Instant Road Repair Mix.	FPD	Sh. Satish Pandey
119	Ms. E. Sandhya	B. Tech	National Institute of Technology Goa	Stability and Rutting characteristics of porous mix asphalt	FPD	Dr. Rajiv Kumar
120	Ms. Fargul Sadaf	B. Tech	Bipin Tripathi Kumaon Institute of Technology, Dwarahat, Almora	Face Recognition Based Attendance Management System	CCN	Sh. Muzahid Hussain
121	Ms. Kanishka Singh	B.Tech.	Madan Mohan Malaviya University of Technology, Gorakhpur	Investigation of the mechanical and durable properties of Cold mix asphalt and Half warm mix asphalt using SDBC gradation	FPD	Sh. Manoj Kumar Shukla
122	Ms. Karuna Agrawal	B. Tech	B.S.A. College of Engineering & Technology Mathura	RoadScan: Vehicle Detection and Classification	CCN	Sh. Prakash Singh
123	Ms. Khushi	B.Tech.	Banasthali Vidyapith, Newai, Tonk, Rajasthan	Comprehensive Evaluation of Bitumen Emulsion Properties Using SARA, FTIR and pH Analysis	FPD	Dr. Rajiv Kumar
124	Ms. Khushi Beniwal	B. Tech	Raj Kumar Goel Institute of Technology	Quarter Allotment Application	CCN	Sh. S. Mariappan
125	Ms. Komandla Vinusha	B.Tech.	Vallurupalli Nageswara Rao Vignana Jyothi Institute of Engineering and Technology, Bachupally, Hyderabad,	Geo Technical Investigation of Dausa Rajasthan Soil	GTE	Sh. Rohit Chamoli,
126	Ms. Krishna A	B.Tech.	Saintgits College of Engineering, Kerala	Evaluation of Bus Stopping Behaviour at Bus Stops in Urban Areas	TPE	Dr. Errampalli Madhu
127	Ms. Kritika Rameshkumar Thakkar	B. E.	L.D.R.P. - Institute of Technology and Research, Gandhinagar, Gujarat	Machine Learning-Based Passenger Car Unit (PCU) Estimation for Urban Roads	TPE	Dr. Ravi Sekhar
128	Ms. M. Durga	B. Tech	SRM University AP, Mangalagiri -Mandal, Neeru Konda, Amaravati, Andhra Pradesh 522502	Design of new pavement	PED	Dr. Sampath kumar
129	Ms. Maanasvi Rawat	B.Tech.	Dayalbagh Educational Institute, Agra	AutoCAD Floor Design of CRRRI" and "Website Smart Utility Planner	CCN	Sh. Prakash Singh
130	Ms. Mahak Agarwal	B.Tech.	National Institute of Technology Durgapur	Multimodal Passenger Terminal	TPE	Dr. Mukti Advani
131	Ms. Meenakshi Prasad	B.Tech.	Saintgits College of Engineering, Kerala	Eye-Tracking Based Analysis of Driver Distraction Patterns in Urban Environments: A Delhi Study	TES	Dr. Vinod Karar
132	Ms. Merin Sara Mathew	B. Tech	Saintgits College of Engineering, Kerala	Eye-Tracking Based Analysis of Driver Distraction Patterns in Urban Environments: A Delhi Study	TES	Dr. Vinod Karar

133	Ms. Mungi Mamatha	B.Tech.	Vallurupalli Nageswara Rao Vignana Jyothi Institute of Engineering and Technology, Bachupally, Hyderabad,	Parking Studies at Patel Chowk Metro Station, New Delhi	TPE	Dr. S. Padma
134	Ms. Muskan Varshney	B. Tech	Indian Institute of Technology Delhi, Hauz Khas	Identification of Structural Defects Using Piezoelectric Sensors	BES	Dr. Naveet Kaur
135	Ms. Nandana Rajeev	B. Tech	Saintgits College of Engineering, Kerala	Land Subsidence Mapping Using QGIS	TPE	Dr. Ravindra Kumar
136	Ms. Neha	B. Tech	B.S.A college of Engineering Technology in Mathura	Traffic Data Analysis using Python Program	CCN	Dr. Ch . Ravi sekhar
137	Ms. Palak Goyal	B.Tech.	Birla Institute of Technology and Science, Pilani	GUI for Speed Optimisation	CCN	Dr. Ch Ravi Sekhar
138	Ms. Parul	B. Tech	Delhi Technological University , Delhi	Noise & Vibration Study for EIA	TPE	Dr. Nasim Akhtar
139	Ms. Patel Dhrumi Prakashbhai	B. Tech	L.D.R.P. - Institute of Technology and Research, Gandhinagar, Gujarat	Developing Query Tool for Vehicle Registration	TPE	Dr.Mukti Advani
140	Ms. Patel Princy Ashvinbhai	B. E.	L.D.R.P. - Institute of Technology and Research, Gandhinagar, Gujarat	Pupil Diameter detection using real time Web cam input	TES	Dr. A. Mohan Rao
141	Ms. Pinki Kumari	B.Tech.	Central University Haryana	Study of Healing Effect in Bituminous Mixtures Using Microwave Heating	PED	Dr. Deepa S
142	Ms. Pitani Anusha	B. Tech	Shri Vishnu Engineering College for Women(Autonomous),Bhimavaram,Andhra Pradesh	Characterization and Comparison on overheating of VG40, CRMB and PMB at Different Duration at 150 Degrees	FPD	Dr. Ambika Behl
143	Ms. Pragya Paliwal	B.Tech.	Banasthali Vidyapith	CRRI Interns Management System	ILT	Mrs. Kamla Masih
144	Ms. Rishita Yadav	B. Tech	IIT Roorkee,Uttarakhand	Optimal Charging Scheduling Problem for Battery Electric Buses (BEBs) in Delhi"	TES	Dr. Ramesh Chandra Majhi
145	Ms. Saraswati Meena	B.Pharma	BITS Pilani Hyderabad Campus, Secunderabad, Telangana	CSIR-CRRI :Financial Patterns,Future Projections & Benchmarking with Peer Institutions	PME	Sh. D. Ravinder
146	Ms. Satti Vijaya Varshini	B. Tech	Shri Vishnu Engineering College for Women (Autonomous), Bhimavaram, , Andhra Pradesh	Laboratory Evaluation of Bituminous Mixes Incorporating Dry-Mixed Polymer for Flexible Pavements.	FPD	Dr. Sarfaraz Ahmed
147	Ms. Shifana S	B. Tech	Saintgits College of Engineering , Kerala	Investigation of Fine Particulate Matter in NCR Region	TPE	Dr. Rina Singh
148	Ms. Shivaali Bhardwaj	B.A. Program in Computer applications and Economics	Lakshmibai college, University of Delhi, Ashok Vihar Phase 3, Delhi	Gender-Based Travel Behaviour Analysis on the DMRC Violet Line	CCN	Dr. Ch. Ravi Shekhar
149	Ms. Shivani Kumari	B. Tech	Indian Institute of Technology, Roorkee	Study of Road User Behaviour During Flooding from a Structured Questionnaire Survey Regarding their Commute Pattern	TES	Dr. Ramesh chandra Manjhi
150	Ms. Shrestha	B. Tech	Banasthali Vidiyapith	Developing and Analyzing a realistic DDoS attack dataset for machine learning based detection	CCN	Sh. Vivek Dubey

151	Ms. Shreya Kumari	B. Tech	Indira Gandhi Delhi Technical University for Women (IGDTUW) Delhi	Design and Development of a Bump Integrator Using a Mechanistic Approach	PED	Dr. Pradeep Kumar
152	Ms. Shruti Sinha	B.Tech.	Banasthali Vidyapith	Low-Cost Asset Management System using Video Vbox	TPE	Dr. Ravindra Kumar
153	Ms. Vanishka	B. E.	Birla Institute of Technology and Science Pilani Campus, Pilani, Rajasthan	Web application for Database Management of Projects and Their Receipts	PME	Sh. D. Ravinder
154	Ms. Vidhi Raturi	B. Tech	Banasthali Vidyapith , Tonk , Rajasthan	Evaluation of Vehicle Lane Changing Decision Process Using AI	TES	Dr. A Mohan Rao
155	Ms. Yarakaraju Pujitha	B. Tech	Shri Vishnu Engineering College for Women, Vishnupur, Bhimavaram	Study on Chemical and Rheological Properties of CEAM(Cement Emulsified Asphalt Mortar)	FPD	Sh. Manoj Kumar Shukla

Visitors to the Institute

Visitors to the Institute

Visitor (name and affiliation)	Purpose	Dates
Prof. R. R. Sonde, Formerly CTO and Member Board of Executive Council, Thermax Ltd., Formerly Executive Director - NTPC Ltd, Outstanding Scientist, Atomic Energy Commission India	For an interaction with the Director and scientists of the Institute.	June 27, 2025
Dr.(Mrs.)N. Kalaiselvi, DG-CSIR & Secretary DSIR, and Sh. Sanjay Kumar, Former Secretary, Ministry of Steel, Govt. of India,	To grace the 7 th CSIR-CRRI Foundation Day celebration as Chief Guest and Guest of Honor, respectively	July 16, 2025
Dr. A.S. Ramadas(GARC), Prof. R R Sonde, Dr. G Mahesh & others	For an interaction with the Director and scientists of the Institute.	August 20, 2025
Dr Pooja Devi, Senior Principal Scientist, CSIR-CSIO	Laboratory Visit and discussion for collaborations	November 11, 2025
Dr N. Kalaiselvi, DG, CSIR	To grace the National Science Day Celebration.	March 11, 2026
A Russian delegation headed by Mr. S.V. Goshovets, Head, ROSAVTODOR, Russia	For a bilateral meeting on collaborative research opportunities.	March 11, 2026

Deputation Abroad

Deputation Abroad

S. No.	Name of the Official	Dates	Country	Purpose
1	Sh. Ganvir Dinesh Vasantryao, Senior Principal Scientist, RPD	July 16-18, 2025	Thailand	To attend 14 th International Conference on Road and Airfield Pavement Technology 2025, Chiang Mai Marriott Hotel Chiang Mai, Thailand
2	Dr. Ravindra Kumar, Chief Scientist, TPE Division	October 01-02, 2025	Singapore	To attend Asia Pacific Conference on Road User Charging, Singapore
3	Prof. Manoranjan Parida, Director	October 25-30, 2025	South Korea	To attend PIARC TC 1.3 International Workshop, Goyang, Republic of South Korea.
4	Sh. Sachin Gowda M K, Dr. Aakash Gupta and Dr. Deepa S	May 06-12, 2025	TU Wien, Vienna	To present their various research papers at the International Conference on Advances in Materials and Pavement Performance Prediction (AM3P) held from 7th to 9th May 2025 at TU Wien, Vienna, Austria.
5	Dr. Pradeep Kumar	May 06-12, 2025	Melbourne, Australia	NTRO International Technical Conference 2025, The Transport Revolution: Solutions in Melbourne, Australia from 7-9, May 2025.
6	Dr. Siksha Swaroopa Kar	January 29-May 20, 2025	USA	To pursue Post-Doctoral Research under the prestigious Raman Research Fellowship; She is the first scientist to secure this Fellowship after 23 years at CSIR - CRRI.
7	Dr. Ravindra Kumar	April 22-25, 2025	Madrid, Spain	Invited as a speaker at the Geospatial World Forum held from 22-25 April in Madrid, Spain, and spoke on "Road Network Planning using GIS."
8	Sh. Sachin Gowda M K, and Dr. Deepa S	January 10-18, 2026	USA	To attend the Transportation Research Board (TRB) Annual Meeting, USA and present their papers on January 12, 2026
9	Sh. Satish Pandey	March 28-April 05, 2026	Russia	To present and attend the conference "The International Transport and Logistics Forum" during April 01-April 03, 2026 and to participate in the International BRICS Transport Forum during March 30-April 04, 2026, at St. Petersburg, Russia

Membership of Staff in Various Technical Committees

Membership of Staff in Various Technical Committees

Name of the Scientist /Staff& Designation	Position held	Name of the committee
Dr. Pradeep Kumar, Chief Scientist	Member	H-6 Committee: Road Maintenance and Asset Management Committee, Indian Roads Congress, New Delhi
	Member	Standing Committee on Road Asset Management System (RAMS), Ministry of Road Transport and Highways(MoRTH), Government of India
	Member	Updating of the Operations Manual for PMGSY Roads, National Rural Infrastructure Development Agency (NRIDA), Ministry of Rural Development, Government of India
	Member	Committee Constituted for Studying and Recommending the Acceptable Limits for Different Pavement Distresses on national Highways and Expressways in India, National Highways Authority of India Government of India
	Principal Member	Resource Management Sectional Committee, MSD 12, Management and Systems Division Council (MSDC), Bureau of Indian Standards, India
Sh. Sunil Jain, Chief Scientist	Member	Construction execution Services, Sectional Committee, SSD 21, Bureau of Indian Standards, India
	Member	Expert Member of UG and PG Board of Studies Civil Engineering Department, Deen Bandhu Chhotu Ram University of Science and Technology, Murthal, Sonapat, Haryana
Dr. Rajeev Goel, Chief Scientist	Member Secretary	B1 Committee of IRC on “General Design Features (Bridges and Grade Separated Structures)” of Indian Roads Congress
	Member	B1.1 Sub-committee of IRC for Revision of IRC:5-2015 of Indian Roads Congress
	Member	B1.5 sub-committee of IRC for New Document on “Crash Barriers and Railings for Bridges” of Indian Roads Congress

	Member	B8 Committee of IRC on "Management, Maintenance and Rehabilitation Committee" of Indian Roads Congress
	Member	Expert Committee of IRC on 'Preparation of Guidelines for Use of Fiber Reinforced Polymer Bars in National Highways Works in different RCC structures such as bridges, viaducts, retaining walls, fascia panel of RE wall, drains etc.' of Indian roads Congress
	Principal Member	Civil Engineering Division Council of Bureau of Indian Standards (BIS)
	Principal Member	Structural Engineering and Structural Sections Sectional Committee, CED 07
	Principal Member	Standardization Work under the Special Structures Sectional Committee, CED-38 of Bureau of Indian Standards (BIS)
	Principal Member	Earthquake Engineering Sectional Committee, CED-39 of Bureau of Indian Standards (BIS)
	Principal Member	Concrete Reinforcement Sectional Committee, CED-54 of Bureau of Indian Standards (BIS)
	Principal Member	Framing document for launching Ready Mixed Concrete certification of Bureau of Indian Standards (BIS)
	Alternate Member	Construction Management Including Safety in Construction Sectional Committee, CED-29
	Alternate Member	Safety in Construction Sectional Committee, CED-45
	Principal Technical Auditor	Scrutiny of DPR's of various states for National Rural Infrastructure Development Agency (NRIDA)
	Member	Technical committee for Cement Sector under Indian Carbon Market, Bureau of Energy Efficiency, Ministry of Power
Dr Naveet Kaur	Vice President and Founding Member	Indian Structural Health Monitoring Society
	Council Member	Indian Road Congress
Siksha Swaroopa Kar	Member Secretary	Indian Road Congress- Reduction of Carbon Footprint in Road Construction and Environment (G-3)
	Member	BIS- EED 08 – Waste Management Sectional Committee
	Alternate Member	BIS- PCD 06 Bitumen, Tar and Related Products Sectional Committee
Dr G Bharath	Co-opted Member	H-9 committee IRC

	Co-opted Member	H-6 committee IRC
Dinesh Ganvir	Alternate Member	CED-2
Dr. Parvathi G. S. Principal Scientist	Executive Committee Member	Indian Chapter of the International Geosynthetic Society
Dr.S. Velmurugan	Co-Convener	Intelligent Transportation System Committee i.e. G-7 of IRC.
	Member	H-1 Committee and H-8 Committees of IRC
	Member since July 2023	Research Council of NATPAC
	Transportation Research Group (TRG-India)	TRG Member (Life member)
Kamini Gupta	Transportation Research Group (TRG-India)	TRG Member (Life member)
Dr Minal Chandra	Member	Transport & Logistics Services - SSD-II-1

Membership of National and International Organisations

Membership of National and International Organisations

- Australian Road Research Board (ARRB), 80A Turners street, PORT MELBOURNE, Australia
- Bureau of Indian Standards, Manak Bhawan, 9 Bahadur Shah Zafar Marg, New Delhi
- Indian Institute of Bridge Engineers (IIBE), New Delhi
- Indian Association of Special Libraries and Information Centers, Kakugachi, Kolkata
- Transportation Research Board of the National Academy of Science, National Research Council, 2101, Constitution Avenue, Washington DC, USA
- Indian Geotechnical Society, C/o Central Soil and Material Research Station, Olof Palme Marg, Hauz Khas, New Delhi
- Indian Roads Congress (IRC), Kama Koti Marg, Sector-6, R.K. Puram, New Delhi
- Government of Indian Librarians Association (GILA) C/o Planning Commission, Library, Yojna Bhawan, Sansad Marg, New Delhi
- Society for Information Science, NISCAIR Building, Hillside Road, New Delhi
- Indian Group of Geotextiles, Central Board of Irrigation & Power, Malcha Marg, Chanakyapuri, New Delhi
- Associate Membership of Current Science Association, Bangalore
- International Road Federation (IRF) India Chapter, New Delhi

MoUs, Agreements and Patents

MoUs with Academic Institutions (National)

- a. School of Planning and Architecture, New Delhi, Delhi – Signed on 4-Apr-2025, valid till 4-Apr-2030
- b. Shiv Nadar Institute of Eminence, Greater Noida, Uttar Pradesh – Signed on 29-May-2025, valid till 29-May-2030
- c. VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad, Telangana – Signed on 16-Jun-2025, valid till 16-Jun-2030
- d. Thapar Institute of Engineering & Technology, Patiala, Punjab – Signed on 8-Oct-2025, valid till 8-Oct-2030
- e. Indian Institute of Technology, Ropar, Punjab – Signed on 21-Feb-2026, valid till 21-Feb-2031

MoUs with Government Bodies (National)

- a. Institute for Steel Development and Growth, Kolkata, West Bengal – Signed on 22-Apr-2025, valid till 22-Apr-2028
- b. Commission for Air Quality Management & School of Planning & Architecture, New Delhi, Delhi – Signed on 10-Jun-2025, valid till 10-Jun-2026
- c. Madhya Pradesh Public Works Department, Madhya Pradesh – Signed on 12-Feb-2026, valid till 12-Feb-2029
- d. Public Works Department, Govt. of NCT of Delhi, Delhi – Signed on 24-Feb-2026, valid till 24-Feb-2029
- e. Department of Urban Local Bodies, Govt. of Haryana, Haryana – Signed on 24-Feb-2026, valid till 24-Feb-2029
- f. Public Works Department, Govt. of Uttar Pradesh, Uttar Pradesh – Signed on 24-Feb-2026, valid till 24-Feb-2029
- g. Public Works Department, Govt. of Rajasthan, Rajasthan – Signed on 24-Feb-2026, valid till 24-Feb-2029
- h. UP State Transformation Commission, Uttar Pradesh – Signed on 16-Mar-2026, valid till 16-Mar-2029
- i. Indian Academy of Highway Engineering (IAHE), Noida, Uttar Pradesh – Signed on 29-Dec-2025, valid till 29-Dec-2028

MoUs with International Institutions

- a. National Transport Research Organization, Australia – Signed on 26-Sep-2025, valid till 26-Sep-2028

MoUs with Non-Governmental Organizations (NGOs)

- a. Times Foundation, Mumbai, Maharashtra – Signed on 21-Feb-2026, valid till 21-Feb-2029

MoUs with Industry Bodies

- a. ITS India Industry Growth Forum, New Delhi, Delhi – Signed on 17-Nov-2025, valid till 17-Nov-2028
- b. Bitumen Forum, New Delhi, Delhi – Signed on 2-Dec-2025, valid till 2-Dec-2030

Technologies Transferred

- 1. Technology titled "Development of rejuvenator for recycling of asphalt pavement material for Hot-in-Plant and Hot-in-Situ Recycling of Bituminous pavement" transferred to M/s Verma Industries, New Delhi on 04 November 2019, license renewed on 1-Apr-2025 valid till 1-Apr-2030.
- 2. Technology titled "Cementitious Grout for use in Cement Grouted Bituminous Mix (CGBM) for Flexible Pavements" transferred to M/s Somani Ecobuild Products LLP, Rajasthan on 22-May-2025 valid till 22-May-2030.
- 3. Technology titled "Automated Vehicle Counting & Classification System (Software)" transferred to M/s Coact Solution Private Limited, Tamil Nadu on 23-Jun-2025 valid till 23-Jun-2028.
- 4. Technology titled "Indigenized Pelletized Fiber for Stone Matrix Asphalt" transferred to M/s Ashita Renewables, Uttar Pradesh on 16-Jul-2025 valid till 16-Jul-2035.
- 5. License for the Technology titled "ECOFIX: Ready to Use Pothole Mix using Iron and Steel Slag Aggregates" extended to the subsidiary of Ramuka Global Services LLP transferred to M/s Ramuka Global Ecoworks Private Limited, Andhra Pradesh on 25-Sep-2025 valid till 18-Oct-2032.
- 6. Technology titled "Modified Mix Seal Surfacing (MSS+)" transferred to M/s JMVD Industries Private Limited, Lucknow on 24-Aug-2020 license renewed on 24-Aug-2025 valid till 24-Aug-2031.
- 7. Technology titled "Portable Light and Glare Measurement System" transferred to M/s Accurate Optics, Panchkula, Haryana on 24-Dec-2025 valid till 24-Dec-2030.
- 8. Technology titled "Wearable Light and Glare Measurement Device" transferred to M/s Accurate Optics, Panchkula, Haryana on 24-Dec-2025 valid till 24-Dec-2030.
- 9. Technology titled "Two Pack on-site Pothole Filing Mix" transferred to the following two industries on 24-Dec-2025 valid till 24-Dec-2028
 - a. M/s Fortis Chemicals Private Limited, Odisha
 - b. M/s Blackgold Infra, Gujarat.
- 10. Technology titled "Ambient Temperature Bituminous Mix Technology for Cold Recycling of Reclaimed Asphalt Pavement Material" transferred to M/s AR Thermosets, Kanpur, Uttar Pradesh on 30-Dec-2025 valid till 30-Dec-2030.
- 11. Technology titled "PatchFILL: The Pothole Repair Machine" transferred to M/s AVK Blackgold Infra Pvt Ltd, Gujarat on 30-Dec-2025 valid till 30-Dec-2030.
- 12. Technology titled "A Process of Producing Bio-Bitumen from Pyrolysis of Lignocellulosic Biomass" transferred to the following fourteen industries on 7-Jan-2026 valid till 7-Jan-2031:
 - a) M/s Bitumenking India Private Limited, Patiala, Punjab;
 - b) M/s Catalyst Petrochem LLP, Delhi;
 - c) M/s Engrow Carbon Energy Private Limited, Erode, Tamil Nadu;
 - d) M/s Future Universal Petrochem Private Limited, Yamuna Nagar, Haryana;

- e) M/s Jalnidhi Bitumen Specialities Private Limited, Kolkata, West Bengal;
 - f) M/s Kotak Nova Green Energy LLP, Jamnagar, Gujarat;
 - g) M/s Negam Care Private Limited, Namsai, Arunachal Pradesh;
 - h) M/s Neptune Petrochemicals Limited, Ahmedabad, Gujarat;
 - i) M/s Nexxus Petro Industries Limited, Ahmedabad, Gujarat;
 - j) M/s Ooms Polymer Modified Bitumen Private Limited, Gurugram, Haryana;
 - k) M/s Rex Fuels Management Private Limited, Mumbai, Maharashtra;
 - l) M/s RK Truevalue LLP, Mumbai, Maharashtra;
 - m) M/s Terra Climate Tech Private Limited, Jaipur, Rajasthan;
 - n) M/s VR Petrochem India LLP, Vadodara, Gujarat
13. Technology titled "A Process of Producing Bio-Bitumen from Pyrolysis of Lignocellulosic Biomass" transferred to the following nine industries on 30-Mar-2026 valid till 30-Mar-2031:
- a) M/s Bitubin India Private Limited, Uttar Pradesh;
 - b) M/s Jainsons India, Uttar Pradesh;
 - c) M/s Torchtar Membranes and Bitumen Products Private Limited, New Delhi;
 - d) M/s GK 91 Bioeconomy Pvt Ltd, Maharashtra;
 - e) M/s Mantaka Technologies Private Limited, Karnataka;
 - f) M/s Madhusudan Organics Private Limited, West Bengal;
 - g) M/s NextGen Sustainable Solutions LLP, Haryana;
 - h) M/s Bitumix India LLP, Assam;
 - i) M/s Straw Biofuels, Punjab

Intellectual Property (IP) Filed and Granted/Registered

Patents Filed: 05

1. Patent titled - "Iron and Steel Slag Aggregate-Based Ready-To-Use Pothole Repair Mix" filed in Germany on 10-Jul-2025 bearing Application No. 202025103964.8.
2. Patent titled - "Iron and Steel Slag Aggregate-Based Ready-To-Use Pothole Repair Mix" filed in USA on 23-Jul-2025 bearing Application No. 19/150,209.
3. Patent titled - "Development of Technical Textile using End-of-Life Plastic" filed in India on 06-Aug-2025 bearing Application No. 202511075899.
4. Patent titled - "VInSD Aerial Inspection Unit (VAIU)" filed in India on 18-Sep-2025 bearing Application No. 202511089311.
5. Patent titled - "Process for Producing Uncoated Cellulose Fiber Pellets for Binder Retention in Stone Matrix asphalt mixes and its application" filed in India on 25-Aug-2025 bearing Application No. 202511080613.

Trademarks Filed: 07

1. Trademark titled - "Concrete Assessment Device for Drones (DrCAD)" filed under Class 9 and 42 on 21-May-2025 bearing Application No. 7018608.
2. Trademark titled - "Automatic Vehicle Counting and Classification (AVCC) System software" filed under Class 42 on 16-Jun-2025 bearing Application No. 7063712.

3. Trademark titled - "Two Pack On-site Pothole Filling Mix" filed under Class 19 & 37 on 6-Aug-2025 bearing Application No. 7161976.
4. Trademark titled - "Transportation Sustainability Index (TSI)" filed under Class 9 on 25-Nov-2025 bearing Application No. 7372652.
5. Trademark titled - "Wearable Light and Glare Measurement Device (LUXSPECS)" filed under Class 9 and 42 on 2-Jan-2026 bearing Application No. 7452294.
6. Trademark titled - "Portable Light and Glare Measurement System (LUMETRA)" filed under Class 9 and 42 on 7-Jan-2026 bearing Application No. 7452295.
7. Trademark titled - "KrishiBind" filed under Class 19 & 37 on 19-Jan-2026 bearing Application No. 7486990.

Trademarks Registered: 01

1. Trademark titled - "Magnicrete (BSS-101)" registered under Class 1 & 19 on 20-May-2024 bearing Application No. 6440656.



Copyright Filed and Registered: 01

1. Copyright titled - "MSS+ MODIFIED MIX SEAL SURFACING" registered on 08-Sep-2025 bearing Registration No. LD-20250175365.

Designs Filed and Registered: 02

1. Design titled - "Concrete Assessment Device for Drones (DrCAD)" filed on 3-Apr-2025 bearing Application No. 455603-001.
2. Design titled - "Large Scale Cyclic Pavement Testing Facility" filed on 22-Aug-2025 bearing Application No. 470907-001.

Papers in Journals

Papers in SCI Journals

1. Aleena VK, Kaur, N Bhalla S, (2025). "Investigating the Potential of Single-Curved Thin Piezoelectric Transducers for Energy Harvesting and Structural Health Monitoring", Journal of Visualized Experiments, World's first peer reviewed scientific video journal, (SCI Journal IF: 1.2)
2. Aleena VK, Kaur, N, Bhalla S, (2025). "Investigating the Potential of Single-Curved Thin Piezoelectric Transducers for Energy Harvesting and Structural Health Monitoring", Journal of Visualized Experiments, World's first peer reviewed scientific video journal. (SCI Journal IF: 1.2)
3. Aleti, U. K., Ravi Sekhar, Ch., Ravinder, K., and Chandra, M. (2026). "Electrification and its influence on trip rates and vehicle choice in urban freight - Case study of Delhi", International Journal of Engineering and Management Sciences, Vol. 32(05), <https://doi.org/10.56042/ijems.v32i05.21440> (SCI)
4. Aravindmanikandan, E., Harshavardhan Goud, E., Radhakrishnan, V., and Bharath, G. (2025). "Evaluation of Optimized Mixing Duration in Mixes Incorporating Coarse and Fine RAP Using a Performance Space Diagram", Journal of Materials in Civil Engineering (ASCE), 37(7). DOI: 10.1061/JMCEE7.MTENG-19479. (SCI IF: 3.0)
5. Arunkumar, G., Moayad, A., Ali, A., Mehta, Y., and Bharath, G. (2026). "Field Evaluation of Low-Temperature Cracking Performance of Highly Elastic Asphalt Mixtures Under Extreme Cold Conditions in Alaska", Transportation Research Record. (Accepted, under production)
6. Ahmed S, Rao K. V. K., Vedagiri P., and Kakade V. (2025). "Impact Analysis of Laterally Distributed Truck Wheel Loads on Performance of Multilane Highway Using Strip-Based Approach", Innovative Infrastructure Solution, 10, 152, pp.1-16, (IF: 2.3)
7. Bhavesh, B., Chandra, S., and Bharath, G. (2025). "Effect of Long-Term Aging on the Performance of Bitumen Extended with Modified Waste Engine Oil Residue (WEOR)", Construction and Building Materials, 485. DOI: 10.1016/j.conbuildmat.2025.141912. (SCI IF: 8.0)
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12. Chandra, M., Busch, P., Olguín, F. P., & Tal, G. (2025). "Paths of progress: Forecasting global electric vehicle demand amidst demographic and economic growth", Transportation Research Part D: Transport and Environment, 147, 104928., <https://doi.org/10.1016/j.trd.2025.104928> (SCI IF: 8.7)
13. Chakraborty, N., Vijay, C., Aggarwal, A., & Gupta, K. (2025). "Do automation and digitalization distract drivers? A systematic review", Accident Analysis & Prevention Journal (in press)", Volume 211, March-April 2025, <https://doi.org/10.1016/j.aap.2024.107888>.
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18. Gowda, M. S., Murthy, Y. I., & Gupta, A. (2025). "Explainable AI based support vector machine models for soaked CBR prediction", *International Journal of Pavement Research and Technology*, 1-17.
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20. Gowda, S., Kunjar, V., Gupta, A., & Havanagi, V. G. (2025). "Pavements through waste valorization: Municipal Solid Waste Incinerated-Bottom Ash (MSWI-BA) as viable fine aggregate alternative", *Environmental Science and Pollution Research*, 1-16.
21. Gowda, S., Shivaiah, N. C., Jayaram, M. A., Gupta, A., & Shinganmakki, J. R. (2025). "Prediction of Deflection Bowl Parameters by Gain Ratio Enabled Feature Selection and Machine-Learning Ensembles", *Journal of Transportation Engineering, Part B: Pavements*, 151(2), 04025022.
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23. Jahan, H., Kar, S. S*, & Swamy, A. K. (2025). "Investigating the effect of foaming additives on the properties of asphaltic materials. Road Materials and Pavement Design", 1-19. <https://doi.org/10.1080/14680629.2025.2571921> (Impact Factor: 3.7)
24. Jadon, R.P.S., Akhtar, N. & Mishra, R.K. (2025). "Assessment of railway noise exposure in slum settlements of a metropolitan city", *Environ Monit Assess* 197, 1059. <https://doi.org/10.1007/s10661-025-14483-8> (SCI, IF: 3.6)
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33. Parvathi, G.S., Dayana, M. PJ., and Sinha, A. K. (2025), "Characterization of River Dredged Material for Sustainable Reuse in Road Construction", *Marine Georesources & Geotechnology*, 1–21. <https://doi.org/10.1080/1064119X.2025.2578800> (SCI IF: 2.7)
34. Parvathi, G.S., Dayana, M.PJ., Havanagi, V.G., and Sinha, A.K. (2025). "Geotechnical and geophysical evaluation and remediation of hill road failure: a case study", *International Journal of Disaster Resilience in*

- the Built Environment. <https://doi.org/10.1108/IJDRBE-04-2024-0045> (SCI IF: 1.5).
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 43. Simunic, M., Sheng, M. S., Wen, L., Majhi, R. C., Ranjitkar, P., Du, B., & Wilson, D. (2026). "Driving adoption: Discrete choice modeling of consumer valuation for wireless electric vehicles charging in Aotearoa", *New Zealand. Travel Behaviour and Society*, 43, 101220. (SCI, Impact Factor: 5.7)
 44. Singh, B., Singh, S. B., Bohra, A., Barai, S. V., & Kar, S. S. (2025). "Probabilistic life cycle assessment of ash-based sintered lightweight aggregates manufactured with producer gas and coal-operated thermal power". *Innovative Infrastructure Solutions*, 10(10), 483. (Impact Factor: 2.3) <https://doi.org/10.1007/s41062-025-02287-1>
 45. Sreenitya, S, Kaur, N. and and Bhalla, S. (2025). "Development and Performance Evaluation of Enhanced Piezoelectric Sensor cum Energy Harvester Based on Flexural Strain Amplification in Real-life Field Conditions", *Sensors*, MDPI, [SCIE Journal IF: 3.4]
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 49. Thakur, D. S., Chalumuri, R. S., and Velmurugan, S. (2025). "Evaluation of time headway maintenance of bus drivers and its impact on road crashes using ADAS alerts", *Proceedings of the Institution of Civil Engineers – Municipal Engineer*, <https://doi.org/10.1680/jmuen.25.00019> (Accepted on 10 October 2025) (SCI)
 50. Thakur, D. S., Chalumuri, R. S, and Subramanian, A. (2025). "Impact of ADAS on Road Crashes: An Interurban Highway Case Study", *International Journal of Intelligent Transportation Systems Research*, <https://doi.org/10.1007/s13177-025-00542-4> (SCI)
 51. Verma, G, Goel, R, Kaur, N, Singh, MK, Rangappa, SM and Siengchin, S (2025). "Understanding behaviour of graphene in natural fibre composites: A comprehensive review", *European Polymer Journal*, Vol 232, 113959, ISSN 0014-3057 <https://doi.org/10.1016/j.eurpolymj.2025.113959> (IF: 5.8)

Papers in Peer Reviewed Journals

1. Bhushan K. S., Sahu A. K. and Goel R. (2025). "Parametric study and Numerical Validation for Evaluating Performance of In-filled Materials in Trench Wave Barrier for Vibration Screening", *Indian Journal of Engineering and Material Sciences*, IJEMS [IF:0.9]
2. Bhushan K. S., Sahu A. K. and Goel R. (2026). ""Experimental study for Evaluating the Performance of in-filled Materials in Trench Wave Barriers for Vibration Screening", *Indian Journal of Engineering and Materials Sciences (IJEMS)*. (Accepted for Publication)
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7. Roy, S., Kar, S. S*, Prasad, P.S. (2025). "A Comparative Study on Finite Element Analysis of Pavements with Foamed Bitumen Treated Base", *Journal of the Indian Roads Congress (IRC)*, Volume-84- Part-1 (January-March, 2025), 51-58. (ISSN 0258-0500)
8. Trivedi, A., Goel, R., Kumar, R., Singh, B., Ghatak, A., and Kumar, R (2025). "Alkali Activated Concrete (AAC) for RMC Application - Construction of Demo Structure and Load Test", *Indian Concrete Journal*, Vol.99, Issue-8, pp.17-31.

Papers in Conferences / Seminars

Papers in Conferences / Seminars

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2. Ahmed S., Kanumula D.N. and Kumar N K V P, "Laboratory Study of Strength Performance of Full-Depth Reclamation with Ordinary Portland Cement Material," 8th Conference of Transportation Research Group of India (CTRG), IIT Guwahati.
3. Alam, S., Padma, S., and Yadav, A., "Investigation of Crash Records in Compliance with IRC and Identification of Black Spots – A Case Study of Nagpur", Recent Advances in Infrastructure Development, NIT Calicut, February 11–13, 2026.
4. Ansari, N. A., Rao, A. M., "Effect of Road Features on Driver physiology". Workshop On Naturalistic Driving Studies for Highway Design and Safety- 17-18 July 2025, IIT Indore
5. Ansari, N. A., Rao, A. M., "Variation of Driver Heart Rate Variability with Road Features and speed, Safe System Perspective for Indian Mixed Traffic Conditions (SafeInd 2026), February 5th and 6th, 2026, National Institute of Technology (NIT) Warangal
6. Arora, B., Agrawal, D., Gupta, K., Velmurugan, S., and Karar, V. "Comparative analysis of AR-HUD vs. conventional dashboard systems in military vehicles", In Innovative Digital Technologies and Applications for Sustainable Society Development (IDTASSD), 68th Annual IETE Convention (AIC-2025), CISO, Chandigarh, 27th -28th Sept, 2025
7. Arora, B., Agrawal, D., Gupta, K., Velmurugan, S., and Karar, V. "Enhancing Urban Traffic Safety Through Optimized Heads-UP Display Systems", 4th International Symposium (OHOW 2025) jointly organized by CSIR-CBRI and One health one world research initiative, The University of Tokyo (Japan) at Roorkee-Haridwar, Uttarakhand, India from 20th to 22th November 2025.
8. Arunkumar G., Moayad Al, Ayman Ali, Yusuf Mehta and G. Bharath, "Field Evaluation of Low-Temperature Cracking Performance of Highly Elastic Asphalt Mixtures Under Extreme Cold Conditions in Alaska", 105th Annual Meeting of the Transportation Research Board (TRB), Washington, D.C., USA, 2026.
9. Balram, Saha, A. Gupta, K., Karar, V. An Investigation into Driver Drowsiness in India using Driving Simulator & VTS, 2nd International Conference RAID, NIT Calicut, 11th- 13th Feb, 2026 (online presented)
10. Bhambhani, B., Chandra, S., and Bharath, G., "Long-Term Aging Characteristics of Asphalt Binders Extended with Modified Waste Engine Oil Residue", CTRG 2025, 17–20 December 2025, IIT Guwahati.
11. Bharath, G., Saboo, N., Mishra, Y., Kakade, V., and Kuna, K. K., "Laboratory Investigation on the Effect of Moisture on Performance Characteristics of Foamed Bituminous Mixes", CTRG 2025, 17–20 December 2025, IIT Guwahati.
12. Bhavesh B., Satish Chandra and G. Bharath, "Laboratory Evaluation of Asphalt Mixtures Using Waste Engine Oil Residue-extended Bitumen", 105th Annual Meeting of the Transportation Research Board (TRB), Washington, D.C., USA, 2026.
13. Butle, V. V., Parvathi, G. S., Mandal, A., & Srinivasan, V., "Numerical evaluation of lightweight geof foam-filled highway embankment on Indian soft subsoils: A case study approach. Proceedings of 1st Geotech Asia International Conference, Goa, India, 7-10 October 2025.
14. Chouhan R., Gupta K., Rao AM and Dhamaniya A., "Behavioral Impact of Distractions on Drivers: Insights from Reaction Time and UAV Data", 3rd International Conference on Transportation Infrastructure Projects: Conception to Execution (TIPCE 2025), IIT-R, 18th – 21st September, 2025
15. D K Sharma, A K Sinha, S S Yashmin, and D Jaysawal, "Investigation and Mitigation of Failure of Reinforced Earth Retaining Wall", Tenth Indian Young Geotechnical Engineers Conference (10 IYGEC, 2025) on 13 – 14th March at Indian Institute of Technology Indore, Madhya Pradesh, India.
16. D Minchala, R Tank, D Sasidharan et al., "Effect of Gradation and Geo-cell Reinforcement on Unbound Granular Materials under Dynamic Loading", 8th Conference of Transportation Research Group of India (CTRG-2025) 17-20 December 2025, Guwahati, India
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18. Deepankar, Kumar R. and Aggarwal P., “Indicators for Assessing Urban Transportation System Resilience”: A Comprehensive Framework, ISG–ISRS National Symposium 2025
 19. Dubey V., Agrawal D., Gupta K., Karar V., “Study of Night time Road Infrastructure Lighting on Road User Safety and perception in the city of Delhi”, 40th National Convention of Electronics & Telecommunication Engineers and National Conference on "IoT and Sensor Embedded IoT: Driving Smart Connectivity" at IET, Local Center, Faridabad, 03-04 December 2025.
 20. Dubey V., Agrawal D., Gupta K., Karar V., “A review of glare sources and mitigation technologies in defense systems”, In Innovative Digital Technologies and Applications for Sustainable Society Development (IDTASSD). 68th Annual IETE Convention (AIC-2025), CISO Chandigarh, 27th -28th Sept, 2025.
 21. Gandem A. K., Gowda S., Bharath G., Behl A., Bhaskar T., Raju SSSVG; “Laboratory performance evaluation of asphalt mixes with biochar-modified bitumen”. Transportation Research Board, 105th Transportation Research Board (TRB) Annual Meeting, Washington, DC, January 11–15, 2025.
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 23. Ganvir D., Sagwal R. and Singh M K, “Repair and Restoration of Expansion joints of concrete pavement- A case study”, proceeding of 14th International Conference on Road and Airfield Pavement Technology (ICPT2025) to be held in Chiang Mai, Thailand, 16th to 18th July, 2025.
 24. Gavadakatta, V.; Sasidharan, D., Bharath G., “Influence of Curing Parameters on the Mechanical and Performance Characteristics of Cold Recycled Emulsion Mixes using 100% RAP”, Transportation Research Efforts for Ecological Sustainability - 2025” (TREES - 2025), 24–25 October 2025, at the Department of Civil Engineering - VNR VJIET, Hyderabad.
 25. Goel R., “Effect of Climate Change on Bridges”, 4th International Symposium on One Health One Worlds, November 20-22, 2025, CSIR-CBRI, Roorkee
 26. Gowda M K, S., Saboo, N., Bharath, G., & Gupta, A., “Experimental Study on the Influence of Out-of-Band Gradations and Ageing on Fracture Properties of Asphalt Concrete using IDEAL-CT Test”, Advances in Materials and Pavement Performance Prediction IV : Contributions to the 4th International Conference on Advances in Materials and Pavement Performance Prediction (AM3P 2025), 7-9 May 2025, Vienna, Austria (pp. 177–180). TU Wien, E230-03 Road Engineering.
 27. Gowda S., Behl A., and Shanmuganathan K.; “Next-Generation Self-Healing Pavements: Performance Enhancement and Self-Healing Behaviour of Asphalt Mixtures Using Microcapsule Encapsulated Rejuvenators”, Global Road Infratech Summit & Expo, Hotel The Ashok, New Delhi, India, February 05-06, 2026.
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CSIR-CRRI in Media

Social Media





Dr Jitendra Singh
@DrJitendraSingh



"This day, 7 January 2026, will go down in the history as India enters into an era of 'Clean, Green Highways', with the successful Technology Transfer titled "Bio-Bitumen via Pyrolysis: From Farm Residue to Roads", an indigenous innovation developed by two of the #CSIR Institutes, Central Road Research Institute (CRRI) New Delhi and Indian Institute of Petroleum (IIP) Dehradun. India is possibly the first country in the world to take bio-bitumen technology to industrial and commercial scale.

India's Highways are now transitioning from fossil-fuel dependency to bio-driven, regenerative and circular economy solutions. The roads constructed using this technology will involve lesser budget, have a more sustainable lifespan, and will also be free from the hazard of causing environmental pollution.

In addition, the shift to indigenous bio-bitumen holds economic potential of replacing imported bitumen worth ₹25,000–30,000 crore annually.

Thus, in keeping with the 'waste-to-wealth' approach, bio-bitumen addresses multiple challenges simultaneously, from Stubble (Parali) management and Air Pollution protection to reduction in foreign imports.

Indeed, an apt illustration of Whole-of-Science, Whole-of-Government and Whole-of-Society effort, which together represents the Whole-of-Nation approach envisioned by PM @NarendraModi for the making of a Viksit Bharat".



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पराली से समाधान, यही है नए भारत की पहचान।

माननीय केंद्रीय मंत्री श्री @ChouhanShivraj जी एवं माननीय केंद्रीय मंत्री श्री @DrJitendraSingh जी की गरिमामयी उपस्थिति में आज नई दिल्ली स्थित सीएसआईआर मुख्यालय में “Bio-Bitumen via Pyrolysis: From Farm Residue to Roads” का तकनीकी हस्तांतरण कार्यक्रम संपन्न हुआ।

पराली से सड़क निर्माण तक की यह पहल न केवल प्रदूषण का समाधान है, बल्कि पर्यावरण के संरक्षण के साथ विकास को नई दिशा देने वाला महत्वपूर्ण कदम भी है।

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Translate post

यह बताते हुए खुशी हैं कि दिनांक 25.06.2025 को संसदीय राजभाषा समिति की दूसरी उप समिति द्वारा कुल 12 कार्यालयों का राजभाषा संबंधी निरीक्षण किया गया जिसमें माननीय समिति द्वारा केवल दो कार्यालयों यथा सीएसआईआर -केंद्रीय सड़क अनुसंधान संस्थान और भारतीय खाद्य निगम को पास किया गया



CSIR CRRI @CSIRCRRRI · Jun 20



'रोज़गार से कामयाबी तक' का अगला एपिसोड **#रोड #रिसर्व** में करियर पर आधारित है। इसे आज (शुक्रवार) शाम 07:30 बजे और शनिवार को दोपहर 12:30 बजे दूरदर्शन (डीडी उर्दू) पर दोबारा प्रसारित होगा।

#सीएसआईआर #सीआरआरआई



This story is from April 05, 2025

Delhi tries eco-friendly pothole repair technology

TNN / Apr 05, 2025, 23:47 IST

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New Delhi: The Public Works Department (PWD) of Delhi govt did a successful live trial of the steel slag-based instant pothole repair technology, called ECOFIX, on the Delhi Secretariat Road on Saturday.

The demonstration was carried out in the presence of PWD minister Parvesh Verma.

According to officials, ECOFIX is a ready-to-use pothole repair mix, developed by CSIR – Central Road Research Institute (CRRI) in collaboration with a startup. "During the live demonstration by teams from CSIR-CRRI and the start-up, both waterlogged and dry potholes were successfully repaired without any dewatering," the department said in a statement. "The most notable advantage of this technology is that the repaired surface can be opened to traffic within 15 to 20 minutes, minimising disruption," it added.

You Can Also Check: [Delhi AQI](#) | [Bank Holidays in Delhi](#) | [Gold Rate Today in Delhi](#) | [Silver Rate Today in Delhi](#)

According to CSIR-CRRI's senior principal scientist, Satish Pandey, who invented the ECOFIX technology, the mix was prepared using metallurgical waste from the steel industry – specifically steel slag. "The use of processed industrial waste not only makes the solution cost-effective and durable, but also promotes environmental sustainability by reducing reliance on natural aggregates," he said.

Andhra Pradesh Embraces ECOFIX

Under the leadership of Hon'ble Chief Minister Shri N. Chandrababu Naidu, the Government of Andhra Pradesh has partnered with CSIR-CRRI to implement ECOFIX across the state's road network.

A live demonstration in Amaravati, attended by Minister for Roads & Buildings Shri Janardhan Reddy, showcased the technology's performance under real field conditions. The demonstration followed a meeting between CSIR's Director General Dr. N. Kalaiselvi and the Chief Minister, where she briefed the state leadership on CSIR's research initiatives, including the ECOFIX technology for sustainable road maintenance.

Andhra Pradesh has also ensured the local availability of steel slag, with Rashtriya Ispat Nigam Limited (RINL) and Arjas Steel Plant collaborating with CSIR-CRRI for processing slag into roadworthy aggregates. With approximately 2 million tonnes of slag generated annually, and an additional legacy stockpile of 2-3 million tonnes, the state has ample raw material to support large-scale deployment.



CSIR delegation led by DG Dr. N. Kalaiselvi meets Andhra Pradesh CM N. Chandrababu Naidu.

After pilot success, PWD to fix potholes with instant tech

By HT Correspondent

Published on: Apr 06, 2025 06:10 AM IST



Ecofix is a ready-to-use pothole repair mix, developed by Central Road Research Institute (CSIR-CRRI) in collaboration with a startup Ramuka Global Services.



Workers at the Ecofix trial on Delhi Secretariat Road. (HT Photo)

The Public Works Department (PWD) on Saturday conducted trial of a steel slag-based instant pothole repair technology "Ecofix" on the Delhi Secretariat Road.

Ecofix is a ready-to-use pothole repair mix, developed by Central Road Research Institute (CSIR-CRRI) in collaboration with a startup Ramuka Global Services. Officials said that the road was opened for traffic immediately after repairs and the successful trial indicated that it may be used for pothole repair work on other stretches too.

VIJAYAWADA 02



Steel slag tech piloted for road repairs in AP

PIONEER NEWS SERVICE
Vijayawada

In a move to modernise road construction in Andhra Pradesh, the State government has launched a pilot project employing cutting-edge 'steel slag' technology. The initiative was formally inaugurated on Sunday by Roads & Buildings, Investments and Infrastructure Minister BC Janardhan Reddy at Mandadam village, near the State Secretariat.

Speaking on the occasion,

the Minister stated that the project aligns with the vision of Chief Minister N. Chandrababu Naidu to deliver high-quality roads to the public. As part of this mission, innovative methods, such as the use of steel slag, are being introduced on a trial basis to enhance durability and efficiency in road construction and maintenance.

Highlighting the government's 'Waste to Wealth' approach, the Minister noted that steel slag—a by-product of steel production—is being

repurposed to promote sustainability in infrastructure development.

The slag is mixed with bitumen to form a compound called 'Ecofix', which is particularly suited for pothole repairs during the monsoon. The Minister added that technical experts will closely monitor the pilot's performance, and depending on its success, the technology may be scaled up for broader road repair and development works across the State.

This initiative marks a step forward in building resilient

Installing noise barriers on Delhi flyovers could reduce health risks: CSIR study

Khushi Bhuta@timesofindia.com

New Delhi: Installing noise barriers across Delhi could yield annual health-related savings of up to Rs 5.5 crore per 1,000 people exposed to noise pollution in a 1km stretch, a Council of Scientific & Industrial Research (CSIR) study has found.

At a conference on recent advances in traffic noise modelling and mitigation for urban areas organised by CSIR-CRRI (Central Road Research Institute) on Friday, researchers discussed solutions to the city's growing noise pollution and showcased the barriers it has been developing to shield residents living near the city's flyovers.

CSIR-CRRI DIRECTOR

Air and noise pollution don't have to be discussed in a sequence. Both continue to affect the city deeply

Director of CSIR-CRRI, Prof. Manoranjan Parida, said, "Air and noise pollution don't have to be discussed in a sequence," adding that both continue to affect the city deeply. Dwarka Expressway is an example of effective implementation of noise barriers on highways, he said. The institute has been recommending the installation

of such barriers at several flyovers, including key traffic points, such as Vasant Vihar flyover and 'silent zones' like the AIIMS flyover.

According to the study presented by Dr. Nasim Ashraf, which undertook a cost-benefit analysis of noise barriers and health impact in case of different modes of transport, exposure to loud noise is linked to several chronic health problems, including sleep disturbance that disrupts productivity, mental health and hormone regulation, stroke, dementia, heart attack and psychological distress.

Akhtar highlighted the possibility that if harmful exposure to noise continues for the next three to five generations, the biological burden

can increase the prevalence of genetic disorders.

Claiming that the barriers reduce noise levels by 10-19 decibel, depending on their height and material, the study suggested that three to five metres of noise barriers be installed along major highways, with residential stretches prioritised.

Suggesting the use of double-glazed windows in houses as a potential way to avoid health risks, the study proposed that vehicles exceeding the permitted number of decibels could be penalised.

Workshops for administrative bodies on noise measurement and control can help provide an efficient framework to tackle the problem, it noted.

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Noise barriers on flyovers reduce health risks: CSIR study

Khushi Bhuta / Nov 22, 2025, 02:38 IST

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Trending Himachal Pradesh rain Delhi weather Anil Pawar raid Samrat Choudhary

Waste to wonder: India's first road trial with plastic used for construction; Military and NHAI to test for load-bearing efficiency

Kushagra Dixit / TNN / Updated: Jul 13, 2025, 10:12 IST

The Central Road Research Institute (CRRI) and Bharat Petroleum Corporation Limited (BPCL) have innovated Geocells, utilizing waste plastic to construct roads, especially in challenging terrains. These 3D block-shaped textiles, filled with soil or construction

THE ECONOMIC TIMES | Industry

English Edition • | 24 November, 2025, 05:15 PM IST | Today's ePaper

India launches first field trial using waste plastic geocells to build roads in difficult terrains

ET Online • Last Updated: Jul 13, 2025, 02:08:00 PM IST

Synopsis
The Central Road Research Institute and BPCL have innovated Geocells, crafted from end-of-life plastic, for road construction in challenging terrains. These three-dimensional modules, filled with soil or debris, are set for field trials with the Military Engineering Services.

Ministry of Science & Technology

CSIR-CRRI's MSS+ Technology Paving the Way for Green Road Construction in Uttar Pradesh

Posted On: 11 AUG 2025 1:45PM by PIB Delhi

Ministry of Education

NIT Goa hosts training program on 'Applications of Geosynthetics in Road Infrastructure Projects'

Posted On: 15 APR 2025 5:06PM by PIB Mumbai

Panaji, 15.04.2025

The National Technical Textiles Mission, Ministry of Textiles, Government of India, and Council of Scientific and Industrial Research (CSIR) - Central Road Research Institute (CRRI) have jointly organized a training programme on 'Applications of Geosynthetics in Road Infrastructure Projects' at the National Institute of Technology (NIT), Goa. The five-day training programme, being organized under the Skill Development Programme for the undergraduate students, was inaugurated by Prof. Manoranjan Parida, Director of CSIR-CRRI, at NIT Goa campus on 14th April 2025. The program will go on till 18th April.

Noise barriers on flyovers reduce health risks: CSIR study

Khushi.Bhuta@timesofindia.com

New Delhi: Installing noise barriers across Delhi could yield annual health-related savings of up to Rs 5.5 crore per 1,000 people exposed to noise pollution in a 1km stretch, a Council of Scientific & Industrial Research (CSIR) study has found.

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Workshops for administrative

bodies on noise measurement and control can help provide an efficient framework to tackle the problem, it noted, adding that noise pollution should be curbed at the source with integrated design solutions that are not an afterthought.

Another study co-authored and presented by Dr Rajeev Kumar Mishra highlighted that railway noise levels affecting vulnerable urban communities remain high (around 90 dB) and frequently exceed limits, with diesel locomotives causing the most severe impact. The affected areas include 14 key locations in the city.

Figure 2: The Times of India (10 Sep 2025)

Printed from

THE TIMES OF INDIA

Life On Loud Track For These Slum Dwellers

Sep 10, 2025, 03:13 AM IST



New Delhi: A study of slum settlements abutting railway tracks found that the residents there were vulnerable to severe health risks due to noise levels that exceeded safe residential standards by up to 85%.

The research, published in journal Environmental Monitoring and Assessment, was conducted by a team led by Rajeev Kumar Mishra, associate professor, department of environmental science and engineering, Delhi Technological University, along with co-author Ravi Pratap Singh Jadon, in collaboration with Nasim Akhtar, chief scientist, CSIR-Central Road Research Institute.

The team of scientists monitored 1,057 train pass-by events in 14 major slum locations near the railway tracks to find noise levels ranging from 120 decibels at Patel Nagar station to 69.1 decibels in Shahdara against the Central Pollution Control Board's acceptable standard of 55 decibels for residential areas. About 10% of Delhi slums are located on railway land or are located close to railway tracks.

The study identified freight trains as a major problem since these generate an average noise level of 100.1 decibels, nearly double the residential limit of 55. Diesel-powered locomotives consistently outpaced their electric counterparts in noise generation, producing two to eight decibels higher sound across all train categories.

"The residents living in slum areas located near railway tracks are more susceptible to higher noise. The noise levels peak between 1pm and 5pm, coinciding with increased train frequency," said Mishra. "During these hours, some locations experienced noise spikes up to 115.6 decibels. The study established a strong correlation between train frequency and noise intensity, with statistical significance in all monitored sites."

The research advocated transitioning from diesel to electric locomotive operations. "Electric trains demonstrated consistently lower noise emissions across all categories: passenger, express, superfast and freight. Electric express trains recorded the lowest average noise at 91.8 decibels, while diesel freight trains peaked at the highest. The diesel-powered passenger train creates more noise than the electric-powered passenger train, highlighting the potential for immediate improvement through locomotive modernisation," the study said while recommending noise abatement measures, including the construction of sound barriers, restriction of diesel train operations in populated areas, and rerouting of freight services away from residential zones.

The report added, "These findings underscore the environmental justice implications of transportation infrastructure, where society's most vulnerable populations bear disproportionate health burdens... As Delhi continues its rapid urban expansion, the study serves as a critical wake-up call for policymakers to prioritise the health and well-being of communities living in the shadows of the city's transportation network. The research provides essential data for developing targeted noise control measures that could significantly improve the quality of life for thousands of Delhi's most vulnerable residents."

Figure 3: The Times of India (31 Dec2025)

Printed from
THE TIMES OF INDIA

From metro to rickshaw: How your commute affects what you breathe

Dec 31, 2025, 02:07 AM IST



New Delhi: Commuters travelling by the Delhi Metro experience the lowest exposure to fine particulate matter (PM2.5), while auto-rickshaw passengers face the highest levels, according to a new study by researchers from Council of Scientific & Industrial Research-Central Road Research Institute (CRRI) and the International Institute of Health Management and Research.

The study, published in the journal Discover Atmosphere on Monday, measured air pollution exposure across various modes of transport along a 10.46-km stretch of the Delhi Metro's Magenta Line during peak hours. It found that average PM2.5 exposure inside metro coaches was 34.2 micrograms per cubic metre, well

below India's safe limit of 60 micrograms per cubic metre. In comparison, auto-rickshaw commuters were exposed to an average of 113.2 micrograms per cubic metre, nearly twice the permissible standard.

Other transport modes recorded varying levels of exposure: 41.9 micrograms per cubic metre for two-wheelers; 68.9 micrograms per cubic metre for window-open buses; 63.1 micrograms per cubic metre for window-closed buses; 62.3 micrograms per cubic metre for window-closed cars; and 71 micrograms per cubic metre for window-open cars. The study noted that closed and air-conditioned vehicles significantly reduced pollution exposure.

S Padma, senior principal scientist for transport planning and environment at CRRI, said, "The PM2.5 concentration was higher in auto-rickshaws than in two-wheelers, as the latter has a more ventilated atmosphere. However, we did not go in depth." The study was aimed to capture how commuters felt exposed to pollution across different modes of transport, she added.

Co-author Nitish Dogra, public health physician and Fulbright Fellow, said closed public transport, particularly the metro with its underground stations, showed lower pollution levels compared with open-road vehicles.

The monitoring was conducted over 18 days in March 2019, measuring pollutants including PM1, PM2.5, PM10, carbon monoxide and black carbon. The study focused on in-vehicle exposure along the Magenta Line route between Kalkaji Mandir and Munirka, with average vehicular speeds of 20-25 kmph and measurements taken at the same time each day.

In addition to air quality monitoring, the researchers conducted a questionnaire survey of 317 commuters at metro stations and nearby bus stops. While most respondents correctly identified the metro as the least polluting mode of transport, their awareness of pollution differences across other modes was limited.

Figure 4: Hindustan (22 Nov 2025)

ध्वनि प्रदूषण लोगों की सेहत बिगाड़ रहा

अध्ययन

नई दिल्ली, प्रमुख संवाददाता। भारत में न केवल वायु प्रदूषण बल्कि ध्वनि प्रदूषण भी लोगों को बीमार कर रहा है। इससे न केवल लोगों की सेहत बल्कि उनकी कार्यक्षमता भी प्रभावित हो रही है।

लंबी अवधि तक ध्वनि प्रदूषण में रहने वाले लोगों के सुनने की क्षमता कम हो रही है। इससे नींद प्रभावित होना, तनाव, उच्च रक्तचाप और दिल से संबंधित बीमारियाँ भी हो रही हैं। ध्वनि प्रदूषण से सबसे ज्यादा प्रभावित हाइवे के पास रहने वाले लोग हैं।

केन्द्रीय सड़क अनुसंधान संस्थान के निदेशक प्रो. मनोहरजन पंडित ने बताया कि सी आर आई द्वारा किए गए अध्ययन से पता चला है कि शहरी इलाकों में यातायात के द्वारा मचाए जाने वाला शोर लोगों के स्वास्थ्य पर भी बड़ा असर डाल रहा है। इससे न केवल शारीरिक बल्कि मानसिक स्वास्थ्य पर भी असर पड़ता है। ध्वनि प्रदूषण से नींद प्रभावित होने की शिकायतें भी आ रही हैं।

182 प्लाईओवर ऐसे हैं दिल्ली में जहाँ होता है अधिक ध्वनि प्रदूषण

250 हटर्ज होता है गाड़ी के इंजन का शोर, इससे है परेशानी

दिए गए सुझाव

- बड़े हाइवे के पास तीन से पांच मीटर के ध्वनि रोधक बैरियर लगाए जाने चाहिए
- संवेदनशील जगह जैसे स्कूल, अस्पताल आदि में नो हाकिंग जोन बनाए जाने चाहिए
- वायु प्रदूषण की तरह सरकार को ध्वनि प्रदूषण मापने के यंत्र भी लगाने चाहिए
- लोगों को ध्वनि प्रदूषण से स्वास्थ्य पर पड़ने वाले असर के बारे में जागरूक करना चाहिए

ध्वनि बैरियर लगाए जाएं

डा. नसीम ने हाइवे पर ऐसी जगह ध्वनि रोधक बैरियर लगाने की सलाह दी है, जहाँ अधिक लोग रहते हैं। उन्होंने बताया कि एक किलोमीटर क्षेत्र में बैरियर लगाने का खर्च 5 करोड़ रुपये आता है और यह 20 साल तक चलता है। अगर इस एक किलोमीटर में 1000 लोग रहते हैं तो उन पर ध्वनि बैरियर का खर्च प्रतिदिन 5600 रुपये आता है। वहीं अगर ध्वनि बैरियर नहीं लगा है तो इसी जगह रहने वाले 1000 लोगों पर प्रतिदिन स्वास्थ्य पर खर्च लगभग 1.56 लाख रुपये आता है।

सख्ती के लिए जुर्माना का प्रस्ताव दिया गया

डॉ. नसीम अख्तर ने अध्ययन के आधार पर सरकार को ध्वनि प्रदूषण फैलाने वाले पर जुर्माना लगाने की सलाह दी है। उन्होंने कहा है कि मानक से पांच डेसिबल अधिक आवाज करने पर 250 रुपये का जुर्माना होना चाहिए। वहीं 6 से 10 डेसिबल पर 500 रुपये, 11 से 15 डेसिबल अधिक होने पर 1000 रुपये, 16 से 20 डेसिबल अधिक होने पर 2000 रुपये, 21 से 30 डेसिबल अधिक आवाज पर 2500 रुपये और 30 डेसिबल से अधिक पर 3000 का वालन होना चाहिए।

Figure 5: The Times of India (24 Feb 2026)

Printed from

THE TIMES OF INDIA

From Road Design To Discipline: Inside Capital's Road Crash Crisis

Feb 24, 2026, 02:23 AM IST



New Delhi: Recklessness may not be the primary cause in some fatal accidents; instead, crashes may be triggered by instinctive human responses to road geometry, revealed insights from a meet on road safety held Monday.

Discussing behavioural patterns at length, experts presented findings that specific geometric features consistently provoke predictable driver responses, and therefore, predictable crash patterns. For instance, faced with a sharp curve, a driver may realise only too late that the bend is tighter than it appeared. The brake is pressed a second too late, and the vehicle skids. On a narrow bridge, a driver may slow abruptly out of caution. The

vehicle behind fails to anticipate the hesitation, and a rear-end collision follows.

Delhi's latest data underscores the urgency. Fatal accidents rose from 1,504 in 2024 to 1,578 in 2025. Pedestrian deaths increased from 584 to 649. Even where minor accidents dipped slightly, fatal pedestrian crashes rose, signalling increasing vulnerability for those on foot.

Dr Mohan Rao, chief scientist and head of engineering services at CRRI, described road crashes as an interaction between three elements: the road (its design, geometry, signage and maintenance), the user (drivers,

CSIR Transfers Indigenous Bio-Bitumen Technology: Turning Farm Residue into Sustainable Roads

MARCH 30 : In a significant step towards sustainable and circular infrastructure development, the Council of Scientific and Industrial Research (CSIR) today organised a Technology Transfer Event for its innovative technology titled "Bio-Bitumen from Lignocellulosic Biomass – From Farm Residue to Roads" for large-scale industry adoption in New Delhi.

The event was attended by Union Minister Shri Shivraj Singh Chouhan; Union Minister of State (Independent Charge) for Science & Technology and Earth Sciences, Dr. Jitendra Singh; Director General, CSIR & Secretary, DSIR, Dr. N. Kalaiselvi, along with senior officials from Ministries, CSIR institutes, industry stakeholders, and policymakers.

Speaking on this occasion, Union Minister for Agriculture & Farmers' Welfare and Rural Development, Shri Shivraj Singh Chouhan described the development of bio-bitumen



technology as a "historic and transformative step" that connects agriculture with infrastructure and innovation. Shri Shivraj Singh Chouhan added that the adoption of bio-bitumen aligns strongly with India's climate commitments, Net Zero targets, and flagship initiatives such as Atmanirbhar Bharat, the National Bio-Energy Mission, and circular economy frameworks. The use of farm residue for high-value infrastructure applications also offers additional income opportunities for farmers while reducing stubble burning and environmental pollution.

Dr. Jitendra Singh in his address highlighted that this initiative reflects India's commitment to self-reliance, clean energy transition, and the principle of "Waste to Wealth." He underlined that the technology demonstrates effective convergence of multiple sectors, including agriculture, science and technology, and infrastructure development, supported by strong public-private partnerships. He added that the bio-bitumen technology has demonstrated promising performance in terms of durability, compatibility with

conventional bitumen, and reduced carbon footprint, making it suitable for large-scale implementation in national highway projects.

Dr. N. Kalaiselvi stated that the development marks a paradigm shift from petro-based to bio-based materials and reiterated CSIR's commitment to regular technology rollouts for national development.

The event also witnessed participation from senior officials of the Ministry of Agriculture & Farmers Welfare, Ministry of Road Transport and Highways

(MoRTH), CSIR leadership, scientists, industry stakeholders, farmers and policymakers, marking a major milestone in translating laboratory-scale innovation into real-world, field-ready solutions for India's road sector.

The technology transfer pertains to the bio-bitumen production process developed by CSIR-Central Road Research Institute (CSIR-CRRI) and CSIR-Indian Institute of Petroleum (CSIR-IIP). Developed through years of research, the bio-bitumen technology utilises agricultural biomass and crop residues as feedstock through a thermochemical conversion process, producing a renewable and environmentally friendly alternative to petroleum-based bitumen. The technology has demonstrated performance equivalent to conventional bitumen while offering substantial environmental and economic benefits, and has been developed for adoption by the Ministry of Road Transport and Highways (MoRTH) in road construction.

कुछ अलग | सड़क निर्माण में फसलों के अवशेष से तैयार 30 फीसदी जैव कोलतार का इस्तेमाल किया जाएगा, पारंपरिक सड़क से मजबूत होगी

जैव कोलतार से सस्ती-टिकाऊ सड़कें बनेंगी

■ गढ़न जैड़ा

नई दिल्ली। पेट्रोल में 20 फीसदी एथेनल मिलाने की तर्ज पर अब सरकार सड़कों के निर्माण में 30 फीसदी जैव कोलतार का इस्तेमाल करेगी। फसल अवशेष से जैव कोलतार बनाने का प्रयोग सफल रहा है। परीक्षण के तौर पर इससे बनी एक किलोमीटर सड़क दो साल से अपनी मजबूती बनाए हुए है।

कृषि मंत्री शिवराज सिंह चौहान और विज्ञान एवं प्रौद्योगिकी मंत्री डॉ. जितेंद्र सिंह को मौजूदगी में आयोजित कार्यक्रम में नौ उद्योगों को तकनीक हस्तांतरण की गई। इसी साल जनवरी में अन्य 14 उद्योगों को यह तकनीक सौंपी गई थी। ये उद्योग पंजाब, हरियाणा, उत्तर प्रदेश, राजस्थान तथा



देश के करीब-करीब सभी हिस्सों के लिए जैव कोलतार तैयार करेंगे।

जैव कोलतार का निर्माण दिल्ली के नैशनल सड़क अनुसंधान संस्थान (सीआरआरआई) ने देहरादून के भारतीय पेट्रोलियम संस्थान

88

लाख टन कोलतार का भारत में हर वर्ष सड़क निर्माण में इस्तेमाल होता है। हर वर्ष 60 करोड़ टन पराली पैदा होती है

58 फीसदी कोलतार आयात किया जाता है

66

इस परिवर्तनकारी तकनीक से पराली



जलाने के मामलों में कमी आएगी, किसान पराली बेचकर आय भी कर सकेंगे और पराली जलाने की समस्या भी खत्म होगी।

- शिवराज सिंह चौहान, केंद्रीय कृषि मंत्री

मजबूत साबित हुई। दो साल में सड़क को जरा भी नुकसान नहीं हुआ। इसलिए अब बड़े पैमाने पर जैव कोलतार बन इस्तेमाल किया जाएगा। इससे फसलों के अवशेषों का भी समुचित उपयोग हो सकेगा।

पेट्रोलियम कोलतार की तुलना में निर्माण सस्ता

देश में हर वर्ष 60 करोड़ टन पराली उत्पन्न होती है। 50 करोड़ टन को भी यदि जैव कोलतार में बदल दिया जाए तो विदेश से आयात की जरूरत नहीं होगी। जैव कोलतार बनाना पेट्रोलियम कोलतार की तुलना में काफी सस्ता भी है।

निर्भरता कम होगी

विज्ञान एवं प्रौद्योगिकी जितेंद्र सिंह ने फसल पिपी सीएसआईआर में इस्तेमाल हो चुके खाद्य तेल से जैव ईंधन बनाने के बाद अब फसलों के अवशेष से जैव कोलतार बनाने में सफलता हासिल की है। इससे पेट्रोलियम उत्पादों पर निर्भरता घटेगी।

कचरे से कंचन : पराली से डामर बनाने की तकनीक मिलने को शिवराज ने बताया ऐतिहासिक



नयी दिल्ली, 30 मार्च (वार्ता)। केंद्रीय कृषि एवं किसान कल्याण तथा ग्रामीण विकास मंत्री शिवराज सिंह चौहान ने सोमवार को पराली और कृषि अवशेषों से डामर बनाने की तकनीक के हस्तांतरण को भारत के भविष्य के लिए एक ऐतिहासिक और शानदार उपलब्धि बताया। उन्होंने यह बात यहां वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद (सीएसआईआर) मुख्यालय में आयोजित एक विशेष समारोह 'फार्म रैजिड्यू टू रोड्स' में लोगों को संबोधित करते हुए कहा। यह कार्यक्रम खेलों में कटाई के बाद रह गए कृषि अवशेषों से सड़क बनाने में इस्तेमाल होने वाले तारकोल या डामर बनाने की तकनीक कृषि वैज्ञानिकों को सौंप जाने के अवसर पर आयोजित किया गया था।

श्री चौहान ने वैज्ञानिकों की टीम को बधाई देते हुए कहा कि पराली से डामर बनाकर सड़क निर्माण तक का यह सफर न केवल किसानों की आय बढ़ाएगा, बल्कि पर्यावरण संरक्षण और आत्मनिर्भर भारत के संकल्प को भी सिद्ध करेगा। इस अवसर पर केंद्रीय विज्ञान एवं

प्रौद्योगिकी मंत्री डॉ. जितेंद्र सिंह और देश के जाने-माने वैज्ञानिक एवं किसान प्रतिनिधि भी मौजूद थे।

श्री चौहान ने कहा कि पराली जलाने से न केवल पर्यावरण को नुकसान पहुंचता है, बल्कि मिट्टी में मौजूद अस्सख्य सुक्ष्म जीवों और कीट-पतंगों का जीवन भी नष्ट हो जाता है। उन्होंने किसानों की मजबूरी का जिक्र करते हुए कहा कि धान की कटाई और गेहूं की बुआई के बीच कम समय होने के कारण किसान इसे जलाने पर मजबूर होते थे, लेकिन अब पराली से डामर बनाने की बायो-बिटुमेन तकनीक ने पराली को एक मूल्यवान संसाधन में बदल दिया है।

उन्होंने बताया कि बायो-बिटुमेन के स्वदेशी उत्पादन से विदेशों से डामर मंगाने के खर्च में भारी कमी आएगी, जिससे देश को लगभग साढ़े चार हजार करोड़ रुपये का सीधा आर्थिक लाभ होगा। उन्होंने विचार जताया कि 'परिणाम के पसीने और प्रौद्योगिकी के प्रकाश' के संगम से अब देश भर में बायो-बिटुमेन की सड़कों का जाल बिछेगा और 'जय जवान, जय किसान, जय विज्ञान, जय अनुसंधान' का नारा एक सशक्त भारत के रूप में गुंजेगा। समारोह में डॉ. जितेंद्र सिंह ने भी अपने विचार साझा करते हुए कहा कि वैश्विक स्तर पर आपूर्ति शृंखलाओं में आने वाली बाधाओं के बीच भारत का आत्मनिर्भर बनना अनिवार्य है। उन्होंने उदाहरण दिया कि जिस तरह भारत ने अपनी वैक्सीन स्वयं विकसित की, उसी तरह अब सड़क निर्माण में 'मेक इन इंडिया' की भागीदारी बढ़ेगी। उन्होंने बताया कि 'कचरे से समृद्धि' की इस अवधारणा से न केवल सड़क परिवहन क्षेत्र को मजबूती मिलेगी, बल्कि यह भारत के 'नेट-जीरो' उत्सर्जन के लक्ष्य की दिशा में भी एक बड़ा कदम साबित होगा।

CSIR Transfers Indigenous Bio-Bitumen Technology: Turning Farm Residue into Sustainable Roads

Jointly developed by CSIR-Central Road Research Institute and CSIR-Indian Institute of Petroleum

Umakant Tripathi
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NEW DELHI: In a significant step towards sustainable and circular infrastructure development, the Council of Scientific and Industrial Research (CSIR) today organised a Technology Transfer Event for its innovative technology titled "Bio-Bitumen from Lignocellulosic Biomass – From Farm Residue to Roads" for large-scale industry adoption in New Delhi.

The event was attended by Union Minister Shivraj Singh Chouhan; Union Minister of State (Independent Charge) for Science & Technology and Earth Sciences, Dr. Jitendra Singh; Director Gen-



eral, CSIR & Secretary, DSIR, Dr. N. Kalaiselvi, along with senior officials from Ministries, CSIR institutes, industry stakeholders, and policymakers.

Speaking on this occasion, Union Minister for Agriculture & Farmers' Welfare and Rural

Development, Shivraj Singh Chouhan described the development of bio-bitumen technology as a "historic and transformative step" that connects agriculture with infrastructure and innovation. Shivraj Singh Chouhan added that the adoption of bio-

SPEAKING ON THIS OCCASION, UNION MINISTER FOR AGRICULTURE & FARMERS' WELFARE AND RURAL DEVELOPMENT, SHIVRAJ SINGH CHOUHAN DESCRIBED THE DEVELOPMENT OF BIO-BITUMEN TECHNOLOGY AS A "HISTORIC AND TRANSFORMATIVE STEP" THAT CONNECTS AGRICULTURE WITH INFRASTRUCTURE AND INNOVATION.

bitumen aligns strongly with India's climate commitments, Net Zero targets, and flagship initiatives such as Atmanirbhar Bharat, the National Bio-Energy Mission, and circular economy frameworks. The use of farm residue for high-value infrastructure applications also offers additional income opportunities for farm-

ers while reducing stubble burning and environmental pollution.

Dr. Jitendra Singh in his address highlighted that this initiative reflects India's commitment to self-reliance, clean energy transition, and the principle of "Waste to Wealth." He underlined that the technology demonstrates effective convergence of multiple sectors, including agriculture, science and technology, and infrastructure development, supported by strong public-private partnerships. He added that the bio-bitumen technology has demonstrated promising performance in terms of durability, compatibility with conventional bitumen, and reduced carbon footprint, making it suitable for

large-scale implementation in national highway projects.

Dr. N. Kalaiselvi stated that the development marks a paradigm shift from petro-based to bio-based materials and reiterated CSIR's commitment to regular technology rollouts for national development.

The event also witnessed participation from senior officials of the Ministry of Agriculture & Farmers Welfare, Ministry of Road Transport and Highways (MoRTH), CSIR leadership, scientists, industry stakeholders, farmers and policymakers, marking a major milestone in translating laboratory-scale innovation into real-world, field-ready solutions for India's road sector.

Questioning the long-standing binary of speed versus safety, Mukti Advani, senior principal scientist at CRRRI, pointed out: "Delhi now has over 100 flyovers, with more under construction. Yet, congestion, pollution and accidents persist."

Cities, she noted, often follow a predictable cycle: an unsafe intersection gets traffic signals, congestion increases; a flyover is constructed, traffic eases briefly; within two-three years, congestion returns. Space is repeatedly allocated to speed rather than safety.

Nearly 30% of Delhi's land is already devoted to roads, while footpaths remain fragmented or encroached upon. "Foot overbridges, requiring four to eight times more physical effort than at-grade crossings, often fail because they disregard everyday human behaviour," she said, arguing that clearing and strengthening footpaths could free significant carriageway space by encouraging walking.

The impact on road safety of authentic, sturdy helmets compared to cheap knockoffs was another key talking point at the meet.

"Last year, nearly 70% of helmets sold in Delhi were fake. To the naked eye, they are indistinguishable from certified ones. But in a collision, the difference is life and death," warned UN special envoy for road safety Jean Todt.

Rajeev Kapur, MD, Steelbird Hi-Tech India, called on two-wheeler companies to mandatorily supply two genuine helmets with every bike at minimal cost. He also proposed AI-powered helmet sensors and GPS speed limiters to eliminate speeding.

The meeting was organised in collaboration with Steelbird Helmets, TRAX – Road Safety NGO and Central Road Research Institute (CSIR-CRRRI).

pedestrians, cyclists and motorcyclists), and the vehicle (its condition and safety systems). A failure in any one — or an overlap of failures — can result in tragedy.

However, he stressed that 'human error' does not automatically mean irresponsibility. Distraction operates at three levels: visual (eyes off the road), manual (hands off the wheel) and cognitive (mind off the task). Even brief overlaps significantly increase crash probability.

Eye-tracking studies conducted on Indian roads offered further insight. Contrary to common belief, drivers do not consistently look straight ahead. On straight stretches, gaze tends to drift to the right. On left-hand curves, rightward bias persists. On right-hand curves, it intensifies further. This instinctive scanning pattern — linked to anticipation and alignment reading — has direct implications for where warnings and signage are placed.

If safety signage falls outside a driver's natural gaze zone, it is likely to be missed. Junctions designed purely on theoretical alignment models, without factoring in real visual behaviour, create blind spots in planning. Even lane indiscipline — often blamed for road chaos — accounts for only about 4% of crashes. Poor geometry, Rao noted, frequently nudges drivers into violations instead of discouraging them.

Anurag Kulshrestha, president and road safety expert at TRAX, echoed this through his discussion on black spot identification and the 'safe system approach' — a philosophy that accepts human fallibility and builds buffers around it, such as safe roads, speeds aligned with road function, predictable design, and shared institutional responsibility.

Yet, progress remains slow. "On average, it takes seven-eight years to fully rectify a notified black spot. During those years, the same stretch continues to claim lives," he said.

Kulshrestha highlighted problematic segments such as the Sohna stretch of Delhi-Mumbai Expressway, parts of Dwarka Expressway, and the Akshardham stretch of Delhi-Meerut Expressway, where abrupt lane drops, inconsistent widths and poorly channelised merging create sudden conflict zones. Infrastructure, he emphasised, must be rigorously audited at the design, execution and post-construction stages — not merely cleared on paper.

Figure 6: The Times of India (09 Oct 2025)

No surprise: 12 pedestrians die every week in Delhi; 1,640 people were hit in road crashes

TNN | Oct 9, 2025, 12:02 PM IST



NEW DELHI: The Supreme Court's recent order for cities to prioritise pedestrians couldn't have come at a better time for Delhi, where a simple walk often feels like a game of survival. From footpaths swallowed by parked cars and shop extensions to vehicles zigzagging across cycle lanes, the city's streets seem designed more for chaos than for safety.

SC directed road-owning agencies in 50 cities and NHAI to start audits of footpaths, noting pedestrian safety is central to accident prevention, mobility and sustainability. It also issued sweeping directions to curb road accident deaths, including mandatory helmet use, strict lane discipline, and a ban on unauthorised red-blue strobe lights and illegal hooters.

In Delhi, 1,640 pedestrians were hit in road crashes until Sept 30 this year. While 1,247 were injured, 464 lost their lives. That is roughly 12 deaths per week.

A 2024 SC-mandated safety audit found 44% of roads lack footpaths, and where they do exist, encroachment and commercialisation quickly swallow up pedestrian space. A 10-minute walk from Nehru Place Chowk to Lady Shri Ram College along Lala Lajpat Rai Marg illustrates this -- cafés, hospitals, schools and metro commuters abound, but pedestrians are squeezed to the edge as pavements vanish and traffic chokes roads. The story is similar across the city.

Delhi Traffic Police officials said drives were held to remove encroachments from footpaths and cycle tracks. There was no response from MCD and PWD.

A study by IIT-Delhi and University College London, 'Perceptions of Pedestrian Safety in Delhi: A Rasch Analysis Approach', surveyed 426 pedestrians across eight wards in south Delhi. It found 12 out of 15 walking conditions were perceived as unsafe, with obstruction and missing guardrails forcing people into traffic.

Dr Mukti Advani, senior principal scientist, CSIR-CRRI, said, "The 2013 CRRI-led FOSTO Score analysis of Maharani Bagh area found footpaths highly uneven, with 16-28 ups and downs per 100 metres. Walkable footpaths — wide and obstruction-free — are essential for pedestrian safety."

"Even after a decade, many footpaths remain narrow, encroached and difficult to use, forcing nearly 70% of pedestrians onto the road. While foot overbridges help in some cases, people naturally take the shortest route; signal-free corridors mostly serve cars, not pedestrians. Road design in India remains vehicle-centric rather than inclusive. Well-planned FOBs still make sense in areas near highways or expressways, but not in urban cities."

Where FOBs and subways do exist, pedestrians often give them a wide berth. It's common to see people crossing the road at grade rather than taking the nearby FOB. A 2018 evaluation of 111 FOBs and subways found only 17 (23%) had escalators; most had 40-50 steps, with extreme cases like ITO having over 100 steps.

Cycle tracks fare no better. Lanes meant for cyclists' safe, eco-friendly commute have become everyone's space. Constant obstructions and broken roads throw riders off balance, sometimes into puddles of stagnant water. Till Sept 30 this year, 97 accidents took place, claiming the lives of 31 cyclists.

"We lose thousands of pedestrians and cyclists every year, yet our cities remain designed for cars. Zebra crossings fade, cycle tracks and footpaths are broken or encroached, and subways double as dark, filthy obstacle courses. No wonder people risk crossing roads instead," said Vivek Chattopadhyaya, senior fellow (clean air and sustainable mobility) at Centre for Science and Environment.

He called for strong legal protection that holds road agencies accountable, an end to car-centric planning, and safe, well-lit walkways.

Govt has tried to bridge the gap. In 2008, DDA set up UTTIPEC to prioritise pedestrians and cyclists in city design. The same year, Delhi launched India's first BRT corridor with dedicated walking and cycling tracks, shaded waiting areas and raised crossings. Though scrapped in 2016, some believe it set a benchmark for integrating non-motorised transport into road planning, and UTTIPEC has continued to uphold pedestrian-first principles in its guidelines.

But plans on paper have done little to ease the daily struggle. In Dwarka, residents recently wrote to CM and LG on behalf of six lakh citizens, calling the state of pedestrian infrastructure a "national emergency in miniature". "Over 90% of footpaths are encroached, with missing manhole covers and broken slabs making walking perilous," said Rejimon CK, founder, Dwarka Forum.

Figure 7: Gateway to Gaming (05 Oct 2025)

Hyderabad police to introduce video games to teach traffic rules

Esports Gaming Published on: October 5, 2025

1 min read

By TeamG2G



The Hyderabad traffic police are planning a unique initiative to spread awareness about road safety among young people by introducing simulator-based video games focused on traffic rules at training centers. Officials said the idea is still being developed, but the goal is to tackle both ignorance and neglect of traffic regulations, especially among teenagers.

Rahul Hegde, Deputy Commissioner of Traffic Police-1, explained that while some in the 13–18 age group are unfamiliar with basic rules like wearing helmets or seatbelts, a larger issue lies with those who knowingly disregard the law. He noted that the games could help reinforce good practices and also shed light on lesser-known traffic rules.

The proposed games will function differently from conventional racing games. Success will not depend on who crosses the finish line first but on completing the race without violating any rules. Extra points and possible rewards will be given to players who follow traffic norms consistently.

A comparable experiment was earlier carried out by the Central Road Research Institute (CRRI) in Delhi. The institute designed 350 racing games with safety as the central theme and tested them on around 5,000 schoolchildren over three months. Mukti Advani, senior principal scientist at CRRI, shared that children were penalized in the game for unsafe behavior and incentivized with rewards like free museum visits for obeying rules. The trial showed encouraging outcomes, with many participants demonstrating improved awareness of traffic violations.

Hyderabad police officials confirmed that discussions with corporate firms to design the games are on the horizon. Joel Davis, Joint Commissioner of Traffic Police, said the concept holds strong potential and that the department intends to work out the details for effective implementation soon.

PTIPRNEWS

Steelbird Helmets' launches 'Mission Save Lives 2.0 India' at National Summit on VRU and Road Safety



PTI

Jun 14 2025

Figure 8: The wire (14 June 2025)

New Road Safety Mission Aims to Save 38,000 Lives Annually with Real Helmets, AI Sensors, and Stricter Enforcement” New Delhi, June 13, 2025 — In a landmark move to address India’s alarming road safety crisis, Mr. Rajeev Kapur, Managing Director of Steelbird Helmets, launched “Mission Save Lives 2.0 India” at the National Summit on Vulnerable Road Users (VRUs) and Road Safety. The summit, designed to align with the objectives of the Marrakech Declaration in India’s context, brought together key stakeholders including government officials, researchers, industry experts, and road safety advocates to collectively chart a safer path forward.	Mission Save Lives 2.0 India was launched against the backdrop of this summit, which focused on critical areas such as the VRU Safety Crisis and Required Solutions in India, Safe Road Design: Need of the Hour, the Role of Government, Media, NGOs, and Private Sectors on Road Safety, and Safer Mobility & Transportation. During the summit the eminent speakers incudes Mr. Mitra Sen Verma, Scientist-E and Director, Bureau of Indian Standards (BIS), Government of India; Prof. Manoranjan Parida, Director, CSIR-Central Road Research Institute; and Dr. Mukti Advani, Senior Principal Scientist, CSIR-Central Road Research Institute.
India recorded approximately 1.72 lakh road fatalities and 4.63 lakh injuries in 2023, with VRUs—primarily two-wheeler riders and pedestrians—bearing the brunt. Two-wheeler users alone accounted for nearly 44.8% of all deaths (around 77,000), with an estimated 54,000 fatalities linked directly to the non-use of helmets. Pedestrians contributed to nearly 20% of fatalities (approximately 35,000 deaths). Together, these two groups represented around 65% of total road fatalities, highlighting the urgent need for targeted interventions.	“Every day, India loses lives that could be saved by simply wearing a real BIS-certified helmet,” Mr. Kapur said at the summit. “Mission Save Lives 2.0 India is a national commitment to make these helmets accessible, affordable, and mandatory for every rider and pillion passenger, including children.” The initiative proposes a phased, nationwide implementation beginning in Tier 1 cities in 2028, expanding to Tier 2 cities by 2029, and reaching Tier 3 cities and rural areas by January 2031. The mission aims to systematically tackle helmet non-compliance by region while ensuring manufacturers can scale production to meet the rising demand.
A key pillar of the mission is the elimination of counterfeit helmets, a significant threat to road safety. The presentation revealed that 95% of BIS license holders are currently flooding the market with substandard helmets falsely bearing the ISI mark. These helmets, often sold at prices as low as ₹110, fail to meet the IS 4151:2015 safety standards, putting countless lives at risk.	

Figure 9: The Times of India (04 Oct 2025)



Figure 10: Bhaskar English (Aug 2025)

Ground Report Delhi roads remain unsafe despite 94% fatal accident reports filed: Fatalities rise among pedestrians, children & bikers; activists call it a governance crisis

New Delhi 8 months ago

Author: Perit Chauhan



Delhi's roads may be witnessing progress on paper, but on the asphalt, the story remains far more grim. In the last four years, Delhi Police have submitted Detailed Accident Reports (DARs) in over 94% of fatal road crash cases—an effort lauded for expediting victim compensation. However, fatality numbers remain alarmingly high, especially among pedestrians, cyclists, children, and two-wheeler users. Activists and citizens alike are calling it what it is: a public health crisis disguised as a transportation issue.

According to Delhi Police data, from January 1, 2021, to April 30, 2025, the city recorded 6,341 fatal accidents. Of these, 6,004 cases had DARs filed—a 94.7% compliance rate. In 2024 alone, Delhi saw 1,534 fatal accidents and 1,504 DARs filed. Notably, in just the first four months of 2025, while 298 fatal accidents occurred, 434 DARs were submitted—indicating progress in clearing backlog cases.

But despite this statistical efficiency, the city's roads continue to be hostile to those most exposed.

Figure 11: NDTV NEWS (10 Dec 2025)



Velmurugan, a senior scientist from CRRI, further highlighted the silent violations that create deadly outcomes:

"From illegal encroachments to blocked zebra crossings, pedestrian infrastructure is routinely compromised. We need to design roads for *people*, not just cars."

Even Delhi's ambitious expressways have failed in inclusion. A case in point is the Delhi-Meerut Expressway, where despite iron grills meant to prevent jaywalking, pedestrian casualties persist.

"You can't blame behaviour when design fails," said Dr Mukti Advani, senior principal scientist at CSIR-CRRI.

सड़क खतरे का हाईवोल्टेज जोन !

सड़क पर दौड़ रही मौत !

उत्तर प्रदेश सबसे ऊपर

साल 2023 मध्य प्रदेश में 13,798 लोगों की मौत

डॉ. मुक्ति आडवाणी, वैज्ञानिक, CRRI

NDTV मध्य प्रदेश | छत्तीसगढ़

NDTV	AIRTEL DTH	TATA PLAY DTH	DISH TV DTH	DIGIANA	GRAND VISION
मध्य प्रदेश छत्तीसगढ़ AVAILABLE ON	345	1167	721	342	331

Figure 12: The Times of India (20 sept 2025)

Printed from

THE TIMES OF INDIA

Tech, early education key to safer roads: Experts

Sep 20, 2025, 12:24 AM IST



Hyderabad: Grassroots awareness programmes about traffic rules could significantly reduce road accidents and enhance road safety, according to panellists on Day 2 of the traffic summit held at Jalavihar Water Park on Necklace Road, Friday.

Experts emphasised that simply introducing better traffic management practices and modern facilities would not yield the desired results unless there was a shift in public behaviour and attitudes towards following traffic rules.

"Every day, around 63 road accidents occur in Telangana, and 21 people lose their lives as a result. The majority of these cases are linked to helmetless driving and passengers not wearing

seatbelts. It is clear that public indifference to traffic rules is a major cause of accidents and compromised road safety," said Janardhan Reddy, former GHMC commissioner.

Experts proposed various solutions, including the use of technology-driven games and stricter enforcement at driving schools.

"This education must start early. One possible solution is to introduce racing games that appeal to the youth. We could create a system where players are awarded bonus points and incentives for not crashing and following

traffic rules strictly. My organisation implemented a similar project in Delhi with a small test group, and it worked wonders," said Mukti Advani, senior principal scientist at the Central Road Research Institute (CRRI).

Experts also encouraged traffic police to further integrate technology into traffic management policies.

"Using AI, we could develop a system to identify grey spots in the city, areas prone to accidents, even before incidents occur, by analysing long-term vehicle data. We could also create an algorithm tailored to Hyderabad's roads for future use in autonomous vehicles," said Anal Ghosh, product lead for Google Maps.

नैनीताल के आठों चौराहों को सर्वे में किया जाएगा शामिल

Mar 19, 2026 06:57 pm IST
Newsrap | हिन्दुस्तान, नैनीताल



नैनीताल में शहर को जाम से निजात दिलाने के लिए आठ चौराहों और व्यस्त गलियों का सर्वे शुरू किया गया है। केंद्रीय सड़क अनुसंधान संस्थान द्वारा 15 से 20 दिनों में रिपोर्ट तैयार की जाएगी। इसमें ट्रैवल पैटर्न, पार्किंग क्षमता और पैदल चलने वालों ...

नैनीताल, संवाददाता। शहर को जाम से निजात दिलाने के लिए शहर के आठ चौराहों और व्यस्ततम गलियों का केंद्रीय सड़क अनुसंधान संस्थान (सीआरआरआई) की ओर से सर्वे शुरू कर दिया गया है, जो कि दूसरे दिन गुरुवार को भी जारी रहा। 15 से 20 दिनों में शहर की सड़कों का सर्वे पूर्ण कर रिपोर्ट तैयार की जाएगी। केंद्रीय सड़क अनुसंधान के टेक्निकल ऑफिसर नीरज प्रजापति ने बताया कि नैनीताल के आठ चौराहों के साथ ही 15 वार्डों का सर्वे किया जा रहा है। हाउस होल्ड सर्वे भी किया जाएगा, जिसमें लोगों से घरों में जाकर पूछा जाएगा कि वे कितना ट्रैवल करते हैं और उनके पास कौन सा वाहन है।

उन्होंने बताया कि शहर की सभी पार्किंग को भी सर्वे में शामिल किया जाएगा। जाना जाएगा कि पार्किंग की क्षमता कितनी है और उनमें कितने वाहन प्रतिदिन आ रहे हैं। इसके साथ ही शहर में पैदल चलने वालों का भी सर्वे होगा। नीरज प्रजापति ने बताया कि शहर के प्रवेश द्वार हनुमानगढ़ी, बारा पत्थर, भवाली आदि से शहर में कितने वाहन रोजाना प्रवेश करते हैं और कितने वाहन 24 घंटे में बाहर जा रहे हैं, इसका ब्यौरा भी एकत्र किया जाएगा। शहर में आने वाले पर्यटकों से जानकारी ली जा रही है कि उन्हें पार्किंग मिलती है या नहीं। बताया कि तल्लीताल चौराहा, एसबीआई, मोहनको, बारा पत्थर, घोड़ा स्टैंड चौराहा, मस्जिद चौराहा आदि में भी वाहनों का सर्वे किया जाएगा। शहर की जिन गलियों में सबसे अधिक वाहन चलते हैं, उनका भी सर्वे किया जाएगा। पब्लिक ट्रांसपोर्ट में रोडवेज की बसों का सर्वे होगा। इसी के आधार पर शहर का मास्टर ट्रैफिक प्लान तैयार किया जाएगा।

Figure 14: Dainik Jagran (18 Mar 2026)

नैनीताल में जाम से मिलेगी निजात, मास्टर प्लान के लिए आज से शुरू होगा सर्वे

BY NABISH KUMAR | EDITED BY: NIRMALA BOMRA
UPDATED: WED, 18 MAR 2026 02:59 PM (IST)

नैनीताल में बढ़ती जाम की समस्या से निपटने के लिए आज से एक विशेषज्ञ सर्वेक्षण शुरू हो रहा है। केंद्रीय सड़क अनुसंधान संस्थान (CRRI) लोनिवि के सहयोग से ...और पढ़ें



नैनीताल को जाम से निजात दिलाने का प्लान बनाने को सर्वे आज से.

जागरण संवाददाता, नैनीताल। शहर को बढ़ते जाम की समस्या से निजात दिलाने के लिए प्रस्तावित मास्टर प्लान तैयार करने के लिए बुधवार से विशेषज्ञ सर्वे शुरू करेंगे। केंद्रीय सड़क अनुसंधान संस्थान सीआरआरआई के विशेषज्ञ लोनिवि के सहयोग से विभिन्न पहलुओं पर सर्वे कर प्लान तैयार करेगा। लोनिवि ने शहरवासियों व पर्यटकों से सर्वे कार्य में सहयोग की अपील की है।

शहर में बढ़ते पर्यटक वाहनों का दबाव जाम की समस्या खड़ी कर रहा है। पूर्व में हाई कोर्ट ने सीआरआरआई को राज्य सरकार के निर्देशों पर सर्वे कर रिपोर्ट पेश करने के निर्देश दिये थे। **प्रारंभिक सर्वे के बाद संस्थान विशेषज्ञों ने जाम से निजात दिलाने के लिए मास्टर प्लान बनाने की पेशकश की थी।** जिसमें शहर में पर्यटक व उनके वाहनों का दबाव, पार्किंग क्षमता, मौजूदा आवासीय भवन समेत विभिन्न पहलुओं पर सर्वे करने के लिए बजट की मांग की थी।

लोनिवि की ओर से भेजे गए 97 लाख के प्रोजेक्ट को शासन ने पूर्व में ही स्वीकृति दे दी है। लोनिवि अधिशासी अभियंता रत्नेश कुमार सक्सेना ने बताया कि जिलाधिकारी के निर्देशों पर बुधवार से सर्वे कार्य शुरू करवाया जा रहा है। जिसमें सीआरआरआई के विशेषज्ञ शहर के प्रवेश मार्ग, आंतरिक मार्गों में वाहनों के दबाव के साथ ही पर्यटकों से साक्षात्कार करेंगे।

अगले चरणों में टीम घर-घर जाकर व मौजूदा होटलों व पार्किंग स्थलों का भी आंकड़ा जुटाएगी। एंट्री मार्गों में कैमरे स्थापित कर शहर में रोजाना प्रवेश करने वाले वाहनों की संख्या भी ली जाएगी। उन्होंने सर्वे कार्य में शहरवासियों के साथ ही पर्यटकों से भी सहयोग की अपील की है।

Figure 15: Dainik Bhaskar (March2026)

नैनीताल को जाम से मिलेगी मुक्ति: CRRRI तैयार कर रहा ट्रैफिक मास्टर प्लान, 40 कैमरों से रखी जा रही नजर

नैनीताल 3 दिन पहले



नैनीताल शहर की फाइल फोटो।

Figure 16: Ahmedabad Study covered in Desh Gujarat, 30.03.2026



DeshGujarat

GUJARAT INDIA/WORLD POLITICS FAITH BUSINESS

CRRRI Survey Identifies Six High-Traffic Junctions for Priority Flyovers in Ahmedabad

March 31, 2026

Ahmedabad Gujarat



Ahmedabad: Six of the city's most congested junctions, one on the western side and five on the eastern side, have been identified for priority flyover construction following a traffic study by the Central Road Research Institute (CRRRI-CSIR), which assessed 25 major intersections, the news report said.

Memco Junction emerged as the most congested, followed by Victoria Garden (Ellisbridge) and Shyamal Junction (Satellite). The other priority locations include Indira Bridge/Airport Road T-Junction, Delhi Darwaza, and Bhakti Circle on SP Ring Road in Ramol-Hathijan.

Staff News

(Retirements, VRS, New Joining, Transfer from / to CSIR-CRRI)

Charge Handover

Date	Event	Details
31 Dec 2025	Handover of Charge	Prof. Manoranjan Parida handed over the additional charge of Director, CSIR-CRRI to Prof. Pradeep Kumar Ramacharla (Director, CSIR-CBRI).
02 Jan 2026	Taking Over of Charge	Dr. Ch.Ravi Sekhar assumed charge as Director, CSIR-CRRI.



31st Dec 2025



02nd Jan 2026

Retirements & Voluntary Retirement Scheme (VRS)

Following staff members have retired from service of the Institute during the period. CSIR-CRRI Welfare Committee organized functions to bid all of them a grand farewell.



Prof. Manoranjan Parida, Director, CSIR-CRRI, 31.12.2025



Mrs. Shakuntla Devi, Work Assistant, 30.04.2025



Dr. Niraj Sharma, Chief Scientist, 31.05.2025



Dr. Rakesh Kumar, Chief Scientist, 31.05.2025



Sumitra Bai, Work Assistant, 31.05.2025 (VRS)



Sh. G.K. Sahu, Chief Scientist, 30.06.2025



Sh. Daya Ram, Sr. Technician (II), 31.07.2025



Mrs. Sunita Saini, Lab. Assistant, 31.07.2025



Sh. Sanjay Choudhary, Hindi Officer, 31.08.2025



Sh. Subhash Chand, Sr. Principal Scientist, 31.10.2025



Sh. Ashok Kumar Arora, Pr. Technical Officer, 31.12.2025



Sh. Anil Kumar, SO (F&A), 31.12.2025



Sh. Devender Kumar, Sr. Technician, 31.01.2026



Dr. S. Velumurgan, Chief Scientist, 28.02.2026



Sh. Ajay Pal Singh, Pr. Technical Officer, 31.03.2026

New Joining / Transfer to CSIR-CRRI

S No.	Name of Employee	Current Designations	Date of Joinig
1	Sh. Abhishek Chakraborty	Scientist	26.11.2025
2	Dr. Dharitri Kahali	Scientist	11.11.2025
3	Sh. Amim Altaf Nabi	Scientist	11.11.2025
4	Dr. Aman Srivastava	Scientist	10.11.2025
5	Dr. Shubham Saurabh	Scientist	04.11.2025
6	Dr. Vaibhav Mittal	Scientist	10.11.2025
7	Dr. Balla Taraka Malleswara Rao	Scientist	30.10.2025
8	Sh. V.Mukesh Vashan	Scientist	17.11.2025
9	Dr. Hrishikesh Ashok Shahane	Scientist	24.11.2025
10	Dr. Shubham Raj	Scientist	27.10.2025
11	Sh. Soumyarup Biswas	Scientist	20.11.2025
12	Sh. Porchelvan A	Scientist	17.11.2025
13	Sh. Abhishek Chakraborty	Scientist	08.12.2025
14	Dr. Sumit Nandi	Scientist	08.12.2025
15	Sh. Vishnuvardhan Mandala	Scientist	29.12.2025
16	Dr. Chintaman Bari	Scientist	15.12.2025
17	Dr. Gavadakatla Vamsikrishna	Scientist	07.11.2025
18	Dr. Mahesh Dhanajirao Gaikwad	Scientist	18.02.2026
19	Sh. Prasenjeet Mitra	SPO	01.05.2025
20	Sh. Jageshwar Mehto	F&AO	01.04.2025
21	Sh. Rajnish	SO (F&A)	17.04.2025
22	Smt. Sunita Yadav	SO (G)	02.02.2025
23	Smt. Binder Kaur	SO (G)	20.04.2025
24	Sh. Divyam	SO (G)	09.04.2025
25	Sh. Meesam Zaidi	SO (G)	03.03.2025
26	Sh. Rajendra Kumar Bairwa	ASO (G)	01.04.2025
27	Sh. Ratan Singh Meena	JSA (G)	18.07.2025
28	Sh. Robin Devdhar	JSA (G)	18.07.2025
29	Ms. Pooja Punia	JSA (G)	18.07.2025
30	Sh. Arvind Kumar Yadav	JSA (G)	18.07.2025
31	Sh. Ram Bali Prasad	JSA (G)	01.09.2025
32	Ms. Vanshika Dhaka	JSA (G)	18.07.2025
33	Sh. Ankit Acharya	JSA (F&A)	18.07.2025
34	Sh. Akhil Gupta	JSA (F&A)	03.09.2025
35	Sh. Tushar	JSA (S&P)	10.07.2025
36	Sh. Laxman Singh	JSA (S&P)	18.07.2025
37	Sh. Prabhat Singh	JSA (S&P)	18.07.2025
38	Sh. Ashish Singh	JSA (S&P)	21.07.2025
39	Sh. Ankit Kumar Saini	JSA (S&P)	24.07.2025
40	Sh. Sugriv Kumar Jha	Jr. Stenographer	17.07.2025
41	Ms. Jay Shree Sahu	Jr. Stenographer	17.07.2025
42	Sh. Aman Chauhan	Jr. Stenographer	18.07.2025

Transfers from CSIR-CRRI

S No.	Name of Employee	Current Designation	Date of Transfer
1	Smt. Parul Jain	SSA (G)	31.12.2025
2	Sh. Sachin Kumar	SSA (G)	31.12.2025
3	Sh. Sanjai Singh	SSA (G)	31.12.2025
4	Sh. Aman Malik	SSA (F&A)	31.12.2025
5	Sh. Ankit Kumar	SSA (F&A)	31.12.2025
6	Sh. Nimesh Mishra*	SSA (G)	31.12.2025

Academy of Scientific and Innovative Research (AcSIR)-CRRI

Academy of Scientific and Innovative Research (AcSIR)-CRRI

During FY:2025-26, 45 new PhD students joined for PhD Program, making total registration at CRRI-AcSIR as 117 This includes 74 Regular and 43 Sponsored Candidates.

Within FY 2025-26, **Ashwani Gupta** Scholars awarded for their PhD, on the convocation held on **22nd November 2025** at **Dr. Ambedkar International Centre, New Delhi**

Scholar's Name: **Dr. Ashwani Gupta**

Supervisor's Names: **Dr. E. Madhu**

Thesis Title: **Methodology to Estimate the Optimum Transport Sustainability Index and values of most suitable indicators for a city utilising an Optimization technique**

Photographs:



During FY 2025-26, AcSIR scholars published 23 papers in total including 8 in SCI journals, 3 in other journals and 12 in conferences.

During this period, Science Club of AcSIR (a club led by Scholars) conducted various activities:

Event Name: **AcSIR 13th Foundation Day Celebration Event**

Date: **3rd April 2025 (Thursday)**

Event Name: **Election of the AcSIR Science Club Committee at CSIR-CRRI (May 2025 – April 2026)**

Date: **29th May 2025 (Thursday)**

Event Name: **Ek Shaam Rajbhasha aur Paryavaran ke Naam**

Date: **5th June 2025 (Thursday)**

Event Name: **74th Foundation Day of CSIR-CRRI**

Date: **July 16, 2025 (Wednesday)**

Event Name: **78th Independence Day Celebration at CSIR-CRRI, New Delhi**

Date: **15th August 2025(Friday)**

Event Name: **Orientation Day Programme for PhD Batch 2025**

Date: **19th, August 2025(Tuesday)**

Event Name: **Teachers' Day Celebration at CSIR–CRRI**

Date: **4th September 2025 (Thursday)**

Event Name: **AcSIR Societal Class Presentation and Interactionat IIM Ahmedabad**

Date: **October**

Event Name: **AcSIR 9th Convocation Ceremony**

Date: **22nd November ,2025(Saturday)**

Event Name: **Aura Day (One Day Event)**

Date: **30th December 2025(Tuesday)**

Event Name: **National Startup Day 2026 & Orientation Day for PhD Batch January 2026 AcSIR-CRRI, New Delhi**

Date: **20th January 2026 (Tuesday)**

Event Name: **Participation at Transportation Research Board (TRB) Annual Meeting,2026**

Date: **January 2026**

Event Name: **SCI-BUILD 2026: Science Day & Women's Day Celebration**

Photographs:



CSIR-Central Road Research Institute, New Delhi

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