

**CSIR****CRRI**

Newsletter

सीएसआईआर-सीआरआरआई समाचार पत्रिका**CSIR - Central Road Research Institute**
सीएसआईआर – केन्द्रीय सड़क अनुसंधान संस्थान

In This Issue

Down The Memory Lane-

Part IV

- Pg 1

Highlights of Major Projects

- Pg 2

Meetings/Workshops/

Conferences

- Pg 6

Honours & Awards

- Pg 15

New Equipment/Facilities

- Pg 17

राजभाषा गतिविधियां

- Pg 18

Lecture Delivered/Invited Talk

- Pg 21

Events Observed/Celebrated

- Pg 22

MoUs/Agreements/Patents

- Pg 27

Visitors

- Pg 28

Training Programmes

- Pg 30

New HoD/Appointments/

Transfers

- Pg 32

Retirements

- Pg 33

CSIR-CRRI in the News

- Pg 34

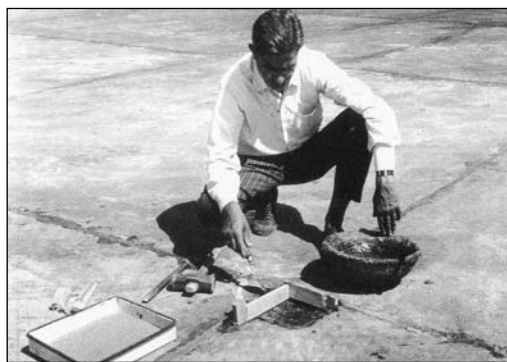


Issue No. 57, April 2018 – September 2018

Website : <http://www.crridom.gov.in>

DOWN THE MEMORY LANE - PART IV

The pioneer R & D work done at CRRI during 1970s resulted in use of synthetic resins for speedy repair of concrete roads and airfield pavements. This was a major breakthrough in the area of maintenance of concrete pavements in India. This technology was used in several airfields under the technical guidance of our scientists. The Military Engineering Services (MES) adopted this technology as a regular specification for airfield pavement repairs and subsequently it was included in IRC guidelines also.



A corner spall under repair with resin mortar

Another landmark study in the area of concrete roads was on precast concrete block pavement (PCBP), which was developed by the institute. Hexagonal concrete blocks were developed for laying directly on the sandy subgrade. A sturdy dowel bar system was also designed to hold the blocks in position and to form a continuous surface. Life cycle cost of these block pavements was lower than the bituminous pavement, although the initial cost was high.



Special precast concrete pavement with ribbed hexagonal blocks for sandy terrain

The decade of 1970s has seen several important developments in the field of flexible pavement construction also. Mastic asphalt surfacing for bridge deck slabs was developed to resist the large amplitude vibrations occurring in the slab due to moving traffic. It was successfully laid on Yamuna Bridge in Delhi and Vivekananda Bridge in Kolkata.

The mastic asphalt was found to be very effective mix to reduce the damage to the pavement due to overloading and high traffic volume. Most of the intersections in Delhi and Mumbai were laid with mastic asphalt during seventies. Anti-skid surface was also provided by grafting the aggregates to the freshly laid surface of mastic asphalt.



Use of mastic asphalt surfacing for bridge deck to counter effects of vibrations and deflections



The decade of 1970 also saw development of tractor bound technologies by CRRRI construction of rural roads in the country. It was an attempt to mechanize the rural road construction with available local resources. The tractor was used as the prime mover to tow the agriculture and other equipments, which could be used for performing different operations of road construction. These technologies not only resulted in economical and faster construction but also led to better quality roads.



Some of the tractor bound technologies developed by CRRRI

In addition to the above, other semi-mechanized equipments were also developed by our scientists to enhance the quality of concrete pavements construction and improve their performance.

Satish Chandra
Director

HIGHLIGHTS OF MAJOR PROJECTS

Evaluation of Existing Roads in Transport Nagar under Jurisdiction of Bulandshahr Development Authority, Uttar Pradesh

The institute has undertaken study for assessment and evaluation of existing road network located in Transport Nagar under the Jurisdiction of Bulandshahr Development Authority, Uttar Pradesh. This project has been awarded to CSIR-CRRRI by

Secretary, Bulandshahr Development Authority (BDA). The preliminary site visit was made in the month of June, 2018 in order to assess the scope of the work to be executed. The project is in progress and some of the photographs of sites are presented below.



Typical View of 40 m RoW Road



Deteriorated Road Condition of 18 m RoW Road

Quality Audit and Supervision for Resurfacing of Rajpath, New Delhi

The objective of the study is to reduce the existing road level of the project roads (Rajpath and adjoining roads connecting to the Amar Jawan Jyoti). The present study involves, quality audit and supervision of milling and resurfacing of Rajpath and adjoining

roads connecting to Amar Jawan Jyoti historical structure. The work of milling and laying is in progress and CSIR-CRRI team is continuously visiting the site, as per the work requirements. Some of the typical photographs of sites are presented below.



Typical View of Milled Surface



Typical View of Exposed Granular Layer After Milling

Pilot Study on Evaluation of Dust Suppressant for Control of Road Dust Emissions

Ms Nitto Denko India Pvt. Ltd has produced a material to suppress the road dust and thus claimed to prevent the re-suspension of the dust particle and thus improve the air quality. As, the application of road dust suppressant agent will control the dust from re-suspension but agent being the liquid and going to stay on the pavement for days together, there is an apprehension that it may also affect the frictional parameters of the pavement. To evaluate the performance of the developed road dust suppressant agent, the firm requested CSIR-NEERI and CSIR-CRRI for the possibility of conducting the studies which also

include the skid resistance studies. A collaborative tri party Non-Disclosure Agreement (NDA) was signed on 19th Feb., 2018 in CSIR-CRRI New Delhi.

To optimize the dosage of the dust suppressant agent, concentration of the dust suppressant agent and dust loading rate, different combinations of these three parameters were used to conduct the experiment. The following photographs show a view of skid resistance test conducted by CSIR-CRRI on the test section using British Pendulum Tester.



Photograph showing the conduction of experiment using BPT

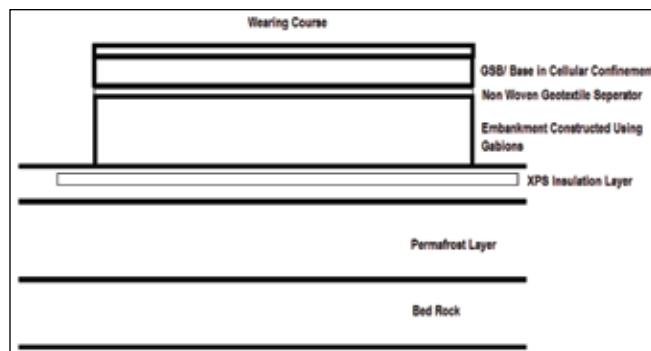


Photograph showing the field trials for evaluation of dust suppressant

Sustainable Road Pavements in High Altitude Regions Using Geosynthetics

The present study is sponsored by G.B. Pant National Institute of Himalayan Environment and Sustainable Development. The performance of road pavements is governed by the strength and stiffness of the pavement layers. Obtaining good quality materials for road construction is becoming increasingly difficult in high altitude regions. Present shortages have enforced users to bring good quality material from long distances, even from plains. The practice of transporting material over such long distances is both costly and energy intensive. One practical solution to this problem would be to use locally available materials which may be considered as "marginal aggregates" due to their inferior quality. This project proposal is aimed at providing satisfactory pavement composition for roads constructed at high altitudes, using locally available/marginal materials.

A typical schematic view of road cross section for construction at very high altitudes (altitudes of 4,600 m (15,000 feet) above mean sea level) is shown below. Locally available materials would be used as infill materials for Geocells and in Gabion.

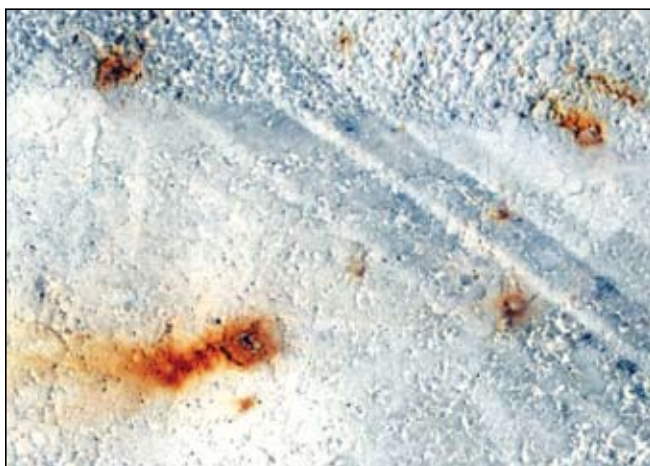


Investigation of Rust Spots on Runway Surface at Silchar Airport

The recently laid surface on Runway has enormous spots of rust to exhibit. Based on sample/taken of mix and aggregates from Runway and thereafter laboratory test were conducted to determine the cause of rust.

The iron (pyrite) content test indicates the Meghalaya aggregates for the rust spot phenomenon and

subsequent damage. Also, the ITS (indirect tensile strength) and MIST (moisture induced stripping test) results show that the mix is highly affected from moisture, concluding that the mix produced from these aggregates is highly susceptible to moisture induced damage. This translates to, a weak structure, both losing appearance and integrity in due course of time.



Rust Spots on Runway

Feasibility Study on “Utilization of Ferrochrome Slag” in Road Construction.

Rapidly depleting deposits of good quality aggregates and ever increasing demand have resulted in recent interventions from the Government, like ban on quarrying of natural aggregates at several places and incentives for utilization of industrial wastes in construction activities. These have spurred several initiatives for exploring alternative materials for road construction activities.

CSIR-Central Road Research Institute (CRRI) has always been in the forefront to take up studies on various industrial wastes for their possible usage in road construction. In this endeavour, recently laboratory evaluation of ferro chrome slag, waste from one ferro alloy industry has been successfully completed showing the feasibility of use of ferro chrome slag in various forms in different pavement

layers (GSB, WMM, DBM & BC). Further to analyze the actual performance in field, laying of test section using ferro chrome slag has been completed. The performance of the ferrochrome slag in actual field

condition over the specified period as per the Indian standards and recommendation is to be evaluated for future use.



Ferrochrome Slag in Road Construction

Investigation of Existing Pavement to Explore the Possibility and Extent of Reclamation in Rehabilitation in Order to Maintain Level of Road on Madhyam Marg, Chandigarh

A team from CRRI visited the site in Chandigarh on 10/5/18, and carried out field investigations. The samples from various layers were collected and transported to CRRI for further material evaluation

and pavement design, traffic data was also collected. The material evaluation and design work is under progress.



Field investigation by team CRRI

R&D Highlights

- Recently laboratory evaluation of Ferro Chrome Slag, waste from Ferro alloy industry of TATA Steel has been successfully completed showing the feasibility of use of Ferro chrome slag in different pavement layers. Inside road of TATA Ferro Alloy plant, Bamnupal, Odisha has been laid using Ferro chrome slag for construction of both granular and bituminous layers in June, 2018. Periodical Performance evaluation will be carried
- Polymer modified emulsion based rejuvenator is used for rejuvenating the runways as preventive maintenance. Laboratory evaluation in terms of aging and moisture resistance of this product has been successfully completed. Also a trial was done at Ambala runway to evaluate the effect of climate on skid resistance, microstructure and permeability on pavement surface.



- The project titled 'Assessment of Traffic Characteristics on Vasundara Road and impact of Trilokpuri and Mayur Vihar Pocket 1 metro stations of Line 7 of Delhi Metro on Vasundara Road- SSP 4587' looked into the aspect of LoS provided at the Vasundara Road given that the Mayur Vihar Pocket 1 and Trilokpuri Metro stations of Pink Line become operational. The project was initiated in July 2018 and completed in September 2018.

MEETINGS/WORKSHOPS/CONFERENCES

121st CSIR-CRRI Research Council Meeting

The 121st Research Council meeting CSIR-CRRI held on 26th and 27th April, 2018. All Chief Scientists, Head of Divisions and Project Leaders attended the meeting. Presentations of Laboratory & Sponsored Projects and update on International Conference on Pavements and Computational Approaches

(ICOPAC-2018) were made by the Scientists. Research Council members visited Pavement Engineering, Bridge Engineering & Structures areas' State of Art facilities and also met all scientists and discussed the R&D related issues.





Activities during 121st Research Council Meeting

Commencement of Dr. P. Raychaudhuri Memorial Lecture Series at CSIR-CRRI

CSIR-CRRI started "Dr. P. Raychaudhuri Memorial Lecture Series" in the honour of Late Dr. P. Raychaudhuri, the First Head, Bridges Division, for his significant professional contributions to the Nation. The Function was organized by CSIR-CRRI at the Seminar Hall on 29th August 2018 from 3.00 PM onwards. The well known Bridge expert, Prof. Mahesh Tandon, Managing Director, M/S Tandon Consultants Pvt. Ltd., was the Chief Guest for this Function. Prof. Mahesh Tandon delivered the inaugural lecture, "Modern Trends in Bridge Engineering". Prof. Mahesh Tandon talked about the precast construction techniques for Bridges presenting the case studies pertaining to the Indian scenario. He highlighted the status of construction of extra-dosed bridges in India and compared it with the Global scenario.

The Function was attended by more than 100 participants including the Family Members of Late Dr. P. Raychaudhuri, and the Former and Present S&T Staff Members of CSIR-CRRI. Prof. Satish Chandra,

Director, CSIR-CRRI, felicitated the Chief Guest, Prof. Mahesh Tandon and Mrs. P. Raychaudhuri. Prof. Satish Chandra also shared his views about the "Dr. P. Raychaudhuri Memorial Lecture Series". He mentioned that for starting this Lecture Series, Mrs. P. Raychaudhuri donated an amount of Rs. Six lacs to CSIR-CRRI. An Endowment Fund is established at CSIR-CRRI with the received money. This money has been invested by CSIR-CRRI as per the rules to meet the expenses on account of organizing the Guest Lecture by an invited Bridge expert on Annual basis.

On this occasion, the daughter of Late Dr. P. Raychaudhuri, Mrs. Debjani, shared the memories of her Father with the audience. Shri G.K. Sahu, Head, Bridge Engineering & Structures (BES) Division, and Shri S.S. Gaharwar, Sr. Pr. Scientist, BES Division, expressed their views about the contributions of Late Dr. P. Raychaudhuri. The Vote of Thanks was presented by Dr. P. Lakshmy, Chief Scientist, BES Division.



Glimpses of Memorial Lecture

International Conference on Safe Riding Initiative (SRI-2018) Jointly with Trax Society

With the objective of bringing together all stakeholders for the common cause of reducing number of fatalities of two wheeler riders killed and injured on our roads, an international conference was organized jointly by CRRI and Trax Society on 12th and 13th April 2018 at CSIR-CRRI, New Delhi.

Stakeholders participated were from academic institutes, researchers, Bureaus of Indian Standards, Ministry of Road Transport & Highways, Delhi Traffic Police, International Road Federation, Helmet Manufacturers and various Non-Government Organizations. Total participants were 100+ including participants from seven countries.

Themes covered in this conference are:

- Two Wheeler Riders & Injury Prevention
- Standardized Helmets
- Behavior and Psychology
- Safe Practices and Role of Government
- Best Practices on Road Safety
- Advertising Standards
- Child as Pillion Riders
- Safe Way to School
- Safe School Zone
- Safe Engineering

- Safe Practices
- Effective Education
- View of Media
- Views of NGO

Based on presentations and discussion, following recommendations have been made:

- Road Engineering needs to be corrected with top priority followed by Education and Enforcement.
- Non-ISI Helmets to be replaced by ISI helmets at the earliest (through enforcement and awareness).
- To Bring the Helmet Production in Mandatory list and treat it as Life Saving Device and to remove GST on the purchase of ISI helmet.
- Hand grip and Saree Guard are mandatory as per Supreme Court Decision and this needs to be checked at the time of vehicle registration.
- Road Safety to be part of all teachers training programs like B-ED/ BTC and TGT.
- To develop National Road Crash Registry Data from Hospital.
- Helmet for child pillion riders to be made compulsory (child above age of 6 years).
- Honorable Prime Minister to be the Head of National Road Safety Program.
- A Government Body to be formed for maintaining advertisement standards with respect to safety.



Conference on Safe Riding Initiative

Meeting on “Design and Fabrication of Mobile Mixing Plant for Construction of Stabilized Roads” on 2nd May 2018

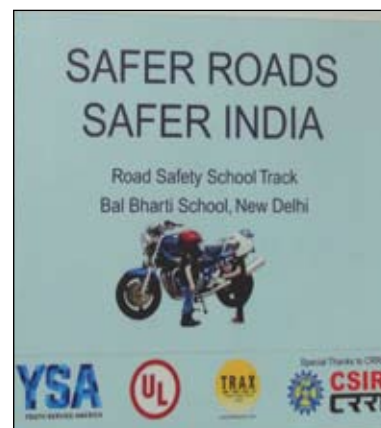
A meeting was held in the Institute on 2nd May to explore the possibility of collaboration between CSIR-CRRI and Venus Equipments Ltd, Gujarat, to jointly develop an "Indigenous mobile soil stabilization equipment". The meeting was chaired by Prof. Satish Chandra, Director, CSIR-CRRI and attended by scientists of various R&D divisions. The company was represented by their technical experts. A presentation was made by Dr. Vasant G Havanagi,

Senior principal Scientist, regarding the technical aspects of collaboration. Discussions were held and it was concluded to carry out the R&D project in two phases (a) Development of small scale model and (b) Development of actual prototype for field applications. There was in principal approval from either party for technical collaboration. The meeting ended with thanks to the chair.

Inauguration of Traffic Learning Park at Bal Bharati School

A traffic Learning Park was Inaugurated at Bal Bharati School, New Delhi by Prof. Satish Chandra, Director, CSIR-CRRI on 11th May 2018. CRRI provided technical support for designing traffic learning park

for children to TRAX Society. Design included basic road markings, signages, zebra crossing, one way/two way traffic concept, rotary, signalized intersection, zebra crossing, etc. for education/learning purpose.



Meeting on Provision of Consultancy Services to Andhra Pradesh Township & Infrastructure Development Corporation by CSIR

A meeting was held in the Institute on 13th June 2018, to explore the possibility of providing Consultancy services to Andhra Pradesh Township & Infrastructure Development Corporation (APTIDC) by CSIR. The meeting was started by Prof. Satish Chandra, Director, CSIR-CRRI with a warm welcome

address and concluded with positive remarks by Mr. V. Ramnath, Vice Chairman, APTIDC. During the meeting, various presentations were also made by our CSIR laboratories (CSIR-CRRI, CSIR-CBRI, CSIR-CEERI, CSIR-CMERI, CSIR-AMPRI).



Presentation on 'Water Proofing Solutions' by M/S Kryton Buildmat Co. Pvt. Ltd.

A technical presentation on "Water Proofing Solutions" was held at BAS Division Conference Hall on 14.06.2018 at 3.00 PM onwards. The Presentation was attended by 30 S&T Officials from BAS Division, Flexible Pavement Division, Rigid Pavement Division

and MBSQ Infrastructure Division. The Technical Presentation covered the technical issues like background of waterproofing problems, probable effective solutions proposed by M/s Kryton Buildmat Co. Pvt. Ltd and successful case studies.

Presentation on Purchase Procedure through Government E-Market (GeM)

Presentation on purchase procedure in GeM was made by GeM officials on 18th June 2018. It was

organised by Stores & Purchase department for better understanding of new purchase procedures.



National Workshop on "Impact of Road Condition on Fuel Consumption of Vehicles" Jointly with PCRA, New Delhi

CSIR-CRRI jointly with Petroleum Conservation Research Association (PCRA), New Delhi organised a workshop on "Impact of Road Condition on Fuel Consumption of Vehicle (IRCoFC)" on 5th July 2018 in CRRI. The workshop started with an Introduction lecture by Dr. Ravindra Kumar, Head TPE- Organizing Secretary, and followed by Opening Remarks by Professor, Satish Chandra, Director, CSIR-CRRI. The special address was given by Chief Guest and Special Invitee Mr. Surendra Pratap, Director PCRA with Vote of Thanks by Dr. Anuradha Shukla, Chief Scientist, TPE. Inaugural session ended with group Photograph. Presentation were made by Shri. Pradeep Kumar, Head PED, CRRI, on Road conditions assessment for project roads using state of art technology. Next presentation

was made by Shri. PV Pradeep Kumar, Head, PME CRRI, on Methodology of conducting fuel consumption on different vehicles and Data Collection. Dr. Ravindra Kumar, Head TPE, CRRI, presented the Results and Different Scenario and its analysis and saving due to change in road condition with Questions and Answer and Way Forward Session.

The inputs and suggestions were provided by Shri. Anoop Bhatt, Vice President Maruti Suzuki India Limited, Dr. K.K. Gandhi, Principal Advisor SIAM, Shri Atanau Ganguali, Deputy ED SIAM, Prof A. L. Aggarwal, Emeritus Prof Amity University, Dr. S. Gangopadhyay, Ex Director CRRI, Consultant ICT, Dr. S.K. Sharma Scientist CPCB and other participant in the workshop.





Learning Organisation Workshop on Learning Disabilities and Personal Mastery

People follow people who believe in something and have the abilities to achieve results in the service of those beliefs. Ultimately, who are the natural leaders of learning organizations? They are actually the learners.

Half day learning organisation workshop was organised in CSIR-CRRI on "Learning disabilities and personal mastery" on 27th July 2018 for Scientists. Sh. Surendra Pratap, Director, PCRA, New Delhi had conducted the session.



Launch of PCRA Project at Bhikaji Cama Place, New Delhi

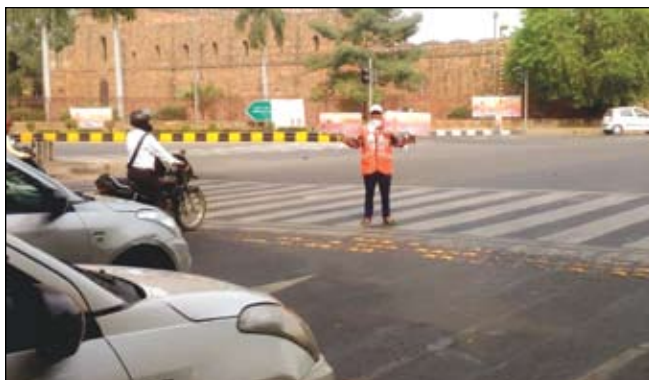
Petroleum Conservation & Research Association (PCRA), under the aegis of Ministry of Petroleum & Natural Gas, Government of India, aims to make oil conservation a national movement. PCRA is entrusted with the task of creating awareness amongst the masses about the importance, methods and benefits of conserving petroleum products & emission reduction.

With this objective, PCRA conducted a study through Central Road Research Institute (CRRI) in 2016-17 to gauge the impact of an awareness campaign on vehicle users' switching off behavior "before", "during" and "after" a 7 days long awareness campaign at Bhikaji Cama Place Traffic Intersection. This study included estimation of fuel consumption and vehicular emission during idling time of vehicles at traffic signals. The observed proportion of switched off vehicles "before", "during" and "after" awareness campaign was 20%, 62% and 53% respectively. Due to the campaign, there was significant reduction in emissions of harmful gases like CO₂, NO_x, CO. As per the study it was estimated, that there is a potential of saving of about Rs 250 Crore in Delhi itself. Hence,

there is tremendous scope of savings fuel resulting in saving of precious foreign exchange.

PCRA aims to increase the awareness about switching off engine at red light, wherever the duration of red light remaining is more than 20 seconds. Hence PCRA, with support of Delhi Traffic Police, is conducting a campaign through CRRI at 100 busiest intersections of Delhi and estimating its impact "before", "during" and "after" the campaign in terms of idling fuel consumption and corresponding emissions and Signal designing. The campaign will also include study of existing status of visibility, hindrance, signal timings and accordingly give recommendation for repositioning of red lights and reconfiguration of signal timings. The Joint Commissioner of Police, Traffic, Delhi Police, Sh. Alok Kumar launched the campaign on 20th September, 2018 in the presence of Executive Director, PCRA, Sh. Alok Tripathi, Director, CRRI Prof. Satish Chandra and the media.

With such campaigns it is expected that there shall be significant improvement in switching off behavior leading to fuel saving and reduction in emissions.



CSIR-CRRI Management Council Meeting

A meeting of Management Council was held on 6th August 2018 at CRRI.

Scientist-Student Interactive Workshop under JIGYASA Programme

The Council of Scientific and Industrial Research (CSIR) has launched a student-scientist connect programme called 'JIGYASA' under which CSIR has joined hands with Kendriya Vidyalaya Sangathan. 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. The interactive meets/ workshops organized as a part of JIGYASA programme for various schools of Kendriya Vidyalaya Sangathan from April, 2018 to September, 2018 is listed below.

Date	Program Name	No. of days	No. of KV Schools	No. of students	No. of teachers
16/04/2018	Interactive Programme	1	1	50	2
12/04/2018	Half day workshop	1	1	40	2
17/04/2018	Interactive Programme	1	1	50	2
16/05/2018	Half day workshop	1	1	40	5
06/07/2018	Interactive Programme	1	1	80	6
30/07/2018	Half day workshop	1	1	62	6
21/08/2018	Interactive Programme	1	1	52	6
24/08/2018	Interactive Programme	1	1	45	3
28/08/2018	Interactive Programme	1	1	50	3
26/09/2018	Interactive Programme	1	4	136	14



HONOURS & AWARDS

- Prof. Satish Chandra Director CSIR-CRRI was Guest of honour at ICI Concrete 2018- Conference & Exhibition on Cable Supported Structures (Buildings & Bridges), Hotel Royal Plaza, New Delhi on 13.07.2018.



- Prof. Satish Chandra, Director CSIR-CRRI was Chief Guest for Valedictory function of RATE-2018 at SVNIT, Surat on 12.08.18.
- NITI Ayog has constituted a national level committee under the chairmanship of Director CSIR-CRRI to review the standards and specification on utilization of steel slag in construction of roads and railway track as substitutes of natural aggregates. The committee will have members from IRC, NHAI, PWDs, MES, MORTH and other stakeholders.
- Prof. Satish Chandra, Director CSIR-CRRI - Chief Guest on Foundation day function of ICI Western UP CENTRE Ghaziabad, on 15.09.18.



- Prof. Satish Chandra Director, CSIR-CRRI was Chief Guest of concrete day celebrations organised by Indian Concrete Institute, Western U.P. Centre, Ghaziabad, giving outstanding concrete structure 2018 award to 6-Lane Hindon Elevated Road from Delhi/U.P. Border to Rajnagar Extension, Ghaziabad on 15.09.2018. The subject structure was inaugurated by Hon'ble Chief Minister, U.P. The Award was received by the officials of GDA & the officials of M/S Navayuga Constructions Pvt. Ltd., the Contractor.
- Prof. Satish Chandra, Director CSIR-CRRI was the Chief Guest for IGS annual function of Delhi Local Chapter on 20.09.18.
- Dr. V.V.L. Kanta Rao, Senior Principal Scientist, Bridge Engineering and Structures Division, has been honored with 'Personality in the Field of Concrete' award for the year 2017 in appreciation of his contribution in the field of concrete technology by the Indian Concrete Institute-New Delhi Centre at a function to celebrate the 'Concrete Day' organized at CSOI Club, New Delhi on 24th September, 2018. The award consisted of a citation which mentioned Dr. Rao's achievements in the field of concrete technology.



- CSIR-Central Road Research Institute, received "SKOCH ORDER OF MERIT" award for the project titled "Copper slag Solid Waste material for Road construction" on 19th September 2018 at New Delhi. The award was given for the R&D innovation carried out by the Institute, both at laboratory and field level, in developing technical design specifications/guidelines for the utilisation of copper slag in Road embankment construction. The project emphasized the utilisation of copper slag as an alternative to conventional earth/aggregates, which not only reduces the total cost of Road construction, but also brings about the sustainability in Road construction practices in India. The award was received by Dr Vasant. G. Havanagi, Senior Principal Scientist and Dr Anil Kumar Sinha, Senior Scientist on behalf of CSIR-CRRI.



- Dr. P.S. Prasad received "IGS Delhi Chapter leadership award - 2018" from Indian Geotechnical society Delhi Chapter, New Delhi (Received cash prize of rupees six thousand only).
- The first prize was awarded to Dr S. Padma, Dr E. Madhu and Dr Ravindra Kumar in Hindi Technical paper along with a consolation prize for Hindi Dictation. Dr Preeti kana Das was awarded second prize in Hindi essay Competition.
- TPE Division was judged to be having the best divisional display at the occasion of the CSIR foundation day celebrations organized by CRRI.

NEW EQUIPMENT/FACILITIES

SARA Analyser

SARA Analyser is used to quantify chemical composition (Saturates, Asphaltene, Resins and Aromatics) of bitumen. The TLC-FID (Thin Layer Chromatography with Flame Ionization Detection) method is based upon polarity and affinity chromatography. The bitumen is dissolved in a non-polar solvent and injected onto silica rods. The non-polar species have more affinity for the solvent and move up the rod by capillary action. The rods are placed in a bath containing a polar solvent and the aromatic species, which have more affinity for this solvent than the silica, move up the rods. This process is continued until the resins and asphaltenes are separated. The rods are then placed on a FID scanner

to quantify the chromatography. The separation of the class components into the following fractions provide a bulk composition of the material tested.



Servo Control Hydraulic Testing Machine

Servo Control Hydraulic testing machine has been installed in Rigid Pavement Division of the CSIR-CRRI in the month of June 2018. This advance machine is capable of generating data for the post peak behavior of concrete specially for fiber reinforced concrete. This machine automatically generates graph between stress-strain, stress-time, strain-time, for concrete specimens. This machine is also used for the measurement of CMOD (crack mouth opening displacement) under loading.



Portable Raman Spectrometer (Enspectr R532) for Raman Active Samples (Liquid/Solid)



UV-VIS Spectrometer (Rigol Ultra 3660)



संस्थान की राजभाषा कार्यान्वयन समिति की तिमाही बैठक

संस्थान की राजभाषा कार्यान्वयन समिति की वर्ष 2018 की दूसरी तिमाही बैठक संस्थान के निदेशक, प्रो. सतीश चंद्र की अध्यक्षता में दिनांक 17/04/2018 को हुई। बैठक में 27 सदस्य एवं प्रतिनिधि सम्मिलित हुए। संस्थान में राजभाषा कार्यान्वयन को गति देने के लिए राजभाषा कार्यों की समीक्षा की गई और निम्नलिखित निर्णय लिए गए –

मद सं.1.1 पिछली तिमाही के दौरान 'सड़क दर्पण' अंक 15 का वितरण किया गया तथा संस्थान के अनुभागों एवं प्रभागों से जारी होने वाले प्रपत्रों को द्विभाषी रूप से तैयार किया गया ताकि भविष्य में ये सभी प्रपत्र संस्थान में द्विभाषी रूप में जारी किए जाएं। इस अनुवाद कार्य के लिए निदेशक महोदय ने राजभाषा अनुभाग की सराहना की। यह निर्णय लिया गया कि भारत सरकार द्वारा निर्धारित लक्ष्यों को ध्यान में रखते हुए सभी अनुभाग एवं प्रभाग अनुवाद की बजाय मूलतः हिंदी में काम बढ़ाने के लिए गंभीरता से प्रयास करें।

मद सं. 2 अनुभागों एवं प्रभागों से प्राप्त राजभाषा कार्यान्वयन संबंधी प्रगति रिपोर्ट के आंकड़ों पर चर्चा की गई। सदस्य सचिव ने बताया कि तिमाही प्रगति रिपोर्ट में दिए गए आंकड़ों के समर्थन में प्रशासनिक अनुभागों द्वारा पत्राचार आदि का रिकार्ड संलग्न न किए जाने तथा रिकार्ड का समुचित रखरखाव न होने के कारण रिपोर्ट में गलत आंकड़े दिए जाने की संभावना बनी रहती है। अतः विभागीय स्तर पर दिए जा रहे सभी आंकड़ों की सत्यता सुनिश्चित करना अनुभागीय/प्रभागीय प्रमुख की जिम्मेदारी है। समिति ने यह निर्णय लिया कि सभी प्रमुख अपने अनुभाग/प्रभाग में संपन्न सरकारी कार्यों (अंग्रेजी सहित) का रिकॉर्ड रखवाएंगे तथा तिमाही प्रगति रिपोर्ट में समुचित सावधानी के साथ संपूर्ण जानकारी उपलब्ध कराएंगे।

मद सं. 3 राजभाषा विभाग, गृह मंत्रालय के वार्षिक कार्यक्रम 2018-2019 में सम्मिलित राजभाषा नीति संबंधी प्रमुख निदेशों एवं निर्धारित लक्ष्यों पर विस्तार से चर्चा की गई। भारत सरकार के निदेशों के अनुसार वरिष्ठ अधिकारियों का यह संवैधानिक दायित्व है कि वे अपने सरकारी कामकाज में अधिक से अधिक हिंदी का प्रयोग करें। इससे उनके अधीन कार्य कर रहे अधिकारियों/कर्मचारियों को प्रेरणा मिलेगी तथा राजभाषा नीति के अनुपालन में गति मिलेगी। निदेशक महोदय ने निदेश

दिया कि सरकार के निर्धारित लक्ष्यों को पूरा करने के लिए धारा 3 (3) के साथ-साथ पत्राचार एवं टिप्पणी लेखन तथा प्रशिक्षण आदि अन्य सरकारी कार्यों में निर्दिष्ट मात्रा में हिंदी के प्रयोग संबंधी नियमों के अनुपालन के लिए सभी प्रमुख उत्तरदायी होंगे।

मद सं. 3.1 समिति को सूचित किया गया कि संस्थान में हिंदी काम की मात्रा को बढ़ाने के लिए प्रशासन में कार्यरत सभी कर्मचारियों एवं अनुभागीय/प्रभागीय प्रमुखों को 'प्रशासनिक शब्दावली' दी गई है। इसके अलावा हिंदी में काम करने के लिए ऑनलाइन शब्दकोष एवं ऑनलाइन अनुवाद की सुविधा भी उपलब्ध है जिसके उपयोग से हिंदी कार्य सरलता से हो जाता है। निदेशक महोदय ने बताया कि अब भी प्रभागों से आने वाले फोल्डर पूरी तरह से द्विभाषी नहीं हैं। अतः क्रय अनुभाग यह सुनिश्चित करे कि प्रयोग में आ रहे सभी फाइलों के पिछले पृष्ठ पर हिंदी टिप्पणियाँ टंकित हों तथा संस्थान में द्विभाषी फाइलें व फोल्डर ही मंगवाए जाएं। यह निर्णय भी लिया गया कि क्रय अनुभाग उन सभी क्रय मांगपत्रों (इंडेंट) को यथाशीघ्र संशोधित करके उन पर कार्रवाई करे जिन्हें राजभाषा अनुभाग ने पूरी तरह से द्विभाषी तैयार करके इंटरनेट पर अपलोड करने हेतु क्रय अनुभाग को भेजा है।

मद सं. 4 सदस्य सचिव ने बताया कि संसदीय राजभाषा समिति को दिए गए आश्वासनों को पूरा करने के लिए संस्थान के सभी अधिकारियों एवं कर्मचारियों द्वारा नियमित कार्रवाई अपेक्षित है। इसके लिए आश्वासनों की सूची तथा संबंधित अधिकारियों द्वारा अपेक्षित कार्रवाई के संबंध में निदेशक महोदय के हस्ताक्षर से कार्यालय ज्ञापन जारी किया गया है। निदेशक महोदय ने बताया कि आश्वासनों को पूरा करने तथा हिंदी में कार्य के प्रति सबका उत्साह बढ़ाने के लिए संस्थान के विभिन्न कार्यक्रमों को मिली-जुली भाषा में आयोजित किया जाता है तथा राजभाषा अनुभाग के सहयोग से भविष्य में भी इसे जारी रखा जाएगा। पिछली तिमाही के दौरान संस्थान द्वारा आयोजित ऐसे कार्यक्रमों के अंतर्गत "जिज्ञासा" तथा 'सतर्कता एवं क्रय प्रक्रिया' कार्यशाला सम्मिलित है। राजभाषा अनुभाग के द्वारा नई भर्ती हुए कर्मचारियों को हिंदी में प्रशिक्षण देने के लिए कार्यशाला आयोजित करने का निर्णय लिया गया।

हिंदी कार्यशाला

संस्थान में दिनांक 28 जून 2018 को हिंदी कार्यशाला का आयोजन किया गया। इसके अंतर्गत संस्थान के प्रशासनिक, आरएंडडी तथा मानव संसाधन विकास व परियोजना प्रबंधन (एचआरडीपीएम) से संबंधित प्रभागों के सरकारी कामकाज में हिंदी के प्रयोग में वृद्धि करने के

लिए चर्चा की गई। कार्यशाला में मार्गदर्शन हेतु संस्थान के पूर्व वरिष्ठ हिंदी अधिकारी डॉ. अनंग पाल को आमंत्रित किया गया। अपने व्याख्यान में उन्होंने संघ सरकार की राजभाषा नीति को सरल रूप में प्रस्तुत किया। संवैधानिक पृष्ठभूमि में उन्होंने राजभाषा हिंदी की

अनिवार्यता और महत्व पर प्रकाश डाला। संस्थान में नव-नियुक्त कर्मचारियों के प्रशिक्षण हेतु विशेष रूप से आयोजित इस कार्यशाला में टिप्पणी लेखन एवं पत्राचार पर एक सत्र अलग से रखा गया। कार्यशाला में राजभाषा

से संबंधित नियमों एवं प्रावधानों की जानकारी देने के अलावा उपस्थित प्रतिभागियों से टिप्पणी लेखन एवं पत्र लेखन के कुछ अभ्यास भी कराए गए।



हिंदी पखवाड़ा

सीएसआईआर-केंद्रीय सड़क अनुसंधान संस्थान (सीएसआईआर-सीआरआरआई), नई दिल्ली में दिनांक 31 अगस्त 2018 को हिंदी पखवाड़े का उद्घाटन किया गया। संस्थान के निदेशक प्रो. सतीश चंद्र ने उद्घाटन समारोह की अध्यक्षता की। अपने वक्तव्य में उन्होंने हिंदी के प्रचार-प्रसार के लिए गंभीर प्रयास करने पर बल दिया। निदेशक महोदय ने संस्थान के सभी कर्मचारियों को हिंदी में कार्य करने के लिए ऊर्जा दी एवं प्रेरित किया।

31 अगस्त 2018 को प्रोफेसर अवनीश कुमार को हिंदी पखवाड़ा उद्घाटन समारोह में विशिष्ट अतिथि के रूप में आमंत्रित किया गया। 'वैज्ञानिक एवं तकनीकी विषय में हिंदी का प्रयोग' विषय पर अपने व्याख्यान में उन्होंने हिंदी के विषय में कई महत्वपूर्ण जानकारियां साझा की। उन्होंने बताया कि देश को एकत्र करने में पूरे भारत संघ की भाषा हिंदी ही रही है, अब समय आ गया है कि हिंदी को ज्ञान एवं चिंतन की भाषा बनाया जाए, जिसके लिए हमें शब्दावली का अधिक से अधिक उपयोग करना चाहिए। हिंदी अधिकारी श्री संजय चौधरी ने आगामी कार्यक्रम यथा 31 अगस्त से 14 सितंबर 2018 तक चलने वाले हिंदी पखवाड़े से सम्बंधित कार्यक्रम की रूपरेखा की जानकारी दी।

हिंदी पखवाड़े के दौरान संस्थान के कार्मिकों के लिए विभिन्न हिंदी प्रतियोगिताओं यथा हिंदी पोस्टर प्रतियोगिता, निबंध लेखन, 'तस्वीर बोलती है' प्रतियोगिता, तकनीकी लेख प्रतियोगिता, श्रुतलेख प्रतियोगिता, वाद-विवाद प्रतियोगिता का आयोजन किया गया। कुछ प्रतियोगिताओं का आंतरिक तथा कुछ का बाह्य मूल्यांकन कराया गया जिनमें न्यूनतम दो निर्णायक रखे गए, जिसका उद्देश्य मूल्यांकन में पारदर्शिता रखना था। हिंदी प्रतियोगिताओं में संस्थान के प्रशासनिक एवं तकनीकी वर्ग के विभिन्न श्रेणी के कर्मचारियों ने बढ़ चढ़कर भाग लिया।

इसी कड़ी में संस्थान के कार्मिकों को जागरूक एवं सतर्क करने

के उद्देश्य से हिंदी पखवाड़े के दौरान आय कर एवं काले धन पर हिंदी व्याख्यान का आयोजन भी किया गया, जिसमें विशेषज्ञ के तौर पर सतीजा दम्पति को बुलाया गया। 11 सितंबर को श्रीमती विभूति सतीजा ने 'आयकर की सामान्य जानकारी' विषय पर महत्वपूर्ण जानकारी दी। उन्होंने आयकर जैसे जटिल विषय पर संस्थान के कार्मिकों को कई रोचक तथ्य बताये। अपने व्याख्यान में उन्होंने वर्तमान में आय कर संबंधी कानूनी कार्रवाई एवं मुकदमेबाजी का सामना करने वाले वोडाफोन जैसे कुछ मामलों पर भी चर्चा की।

12 सितंबर को श्री भुवनेश सतीजा ने 'काले धन के वैधीकरण पर रोक' विषयक अपने व्याख्यान में हवाला एवं वित्तीय धोखाधड़ी जैसे मामलों पर प्रकाश डाला। काले धन को वैध बनाना (मनी लॉन्ड्रिंग) जिसमें अवैध रूप से प्राप्त धन के स्रोतों को छिपाने से होने वाली समस्याओं से चेताया। उन्होंने यह भी कहा कि अवैध रूप से कमाया हुआ कोई भी धन, जिस पर भले से आय कर दिया गया हो वह काले धन की श्रेणी में ही आएगा। ऐसी बारीक बातों के बारे में उन्होंने संस्थान के कार्मिकों को अवगत कराया, जिससे सभी कार्मिक लाभान्वित हुए।

इसके साथ ही 14 सितंबर 2018 को हिंदी दिवस एवं पुरस्कार वितरण समारोह का आयोजन भी किया गया जिसमें श्री बालेंदु शर्मा दाधीच जी को आमंत्रित किया गया। उन्होंने 'हिंदी के डिजिटल उपयोग के द्वारा 'भाषा उत्सव' पर केंद्रित अपने व्याख्यान में बेहद दिलचस्प ढंग से बताया। उन्होंने माइक्रोसॉफ्ट अनुवाद के साथ-साथ कंप्यूटर से जुड़े विंडो टेन की नई-नई तकनीकों से भी अवगत कराया। संस्थान इसका लाभ अपने अनुसंधान एवं विकास कार्यों में हिंदी के प्रयोग में वृद्धि के माध्यम से अवश्य उठाएगा। पखवाड़े के अंतर्गत निदेशक प्रोत्साहन पुरस्कार योजना के अंतर्गत संस्थान के अनुभागों/प्रभागों के हिंदी कार्य की समीक्षा की गई।

पुरस्कार वितरण समारोह में संस्थान के कार्मिकों को संबोधित करते हुए निदेशक प्रो. सतीश चंद्र ने कहा कि आम जनता तक वैज्ञानिक उपलब्धियों की जानकारी राजभाषा के माध्यम से पहुंचाया जाना नितांत आवश्यक है और इसके लिए यह जरूरी है कि संस्थान के वैज्ञानिक तकनीकी लेखन को बढ़ाने के लिए विशेष रूप से प्रयास किए जाएं। इसके साथ-साथ प्रशासन के क्षेत्र में सभी अधिकारियों द्वारा हिंदी में कार्य की मात्रा बढ़ाने के लिए और अधिक गंभीर प्रयास करने की भी आवश्यकता है।

समारोह में निदेशक प्रोत्साहन पुरस्कार योजना के अंतर्गत उन सभी अधिकारियों को पुरस्कार दिया गया जिन्होंने पिछले वर्ष

के दौरान हिंदी में प्रशंसनीय कार्य किया था। पखवाड़े के दौरान आयोजित प्रतियोगिताओं में प्रथम, द्वितीय, तृतीय एवं सात्वना पुरस्कार प्राप्त करने वाले कर्मचारियों को भी प्रमाण-पत्र प्रदान किया एवं प्रोत्साहन राशि का डिजिटल भुगतान किया गया। मूल रूप से हिंदी में टिप्पणी एवं प्रारूप लेखन करने वाले कार्मिकों को सम्मानित करते हुए उन्हें पुरस्कृत किया गया। इस अवसर पर हिंदी अधिकारी, श्री संजय चौधरी ने संस्थान में राजभाषा कार्यान्वयन के संबंध में सभी कार्मिकों से यह अपील भी की कि यह उत्साह केवल एक पखवाड़े तक सीमित न रहकर हमारे दैनिक कार्यों एवं व्यवहार का हिस्सा बनेगा, हम हिंदी में अधिक से अधिक कार्य करेंगे एवं अपनी राजभाषा को यथायोग्य सम्मान देंगे।



LECTURE DELIVERED/INVITED TALK

- Dr. S. Velmurugan gave an invited talk on 'Evaluation of RSA Benefits through Cost - Benefit Analysis' in the MoRTH arranged at Vigyan Bhavan, New Delhi on 24th April 2018.



- Sh. Manoj Kumar Shukla attended the meeting of ASSOCHAM's Core Group on Roads & Highways as member of National Council on Roads and Highways, ASSOCHAM on 8th June 2018.
- Dr S. Padma and Ms Minal attended the Recruitment and Assessment Board (RAB) Workshop on "Modeling And Simulation" conducted at CSIR- Fourth Paradigm Institute (4PI), Bengaluru from June 19th–21st, 2018.
- Prof. Satish Chandra, Director CSIR-CRRI delivered a keynote/lecture on 'New Materials & Technology for Highway Construction in India' during 2nd AMEA bitumen 2018 at Mumbai on 1st August 2018.
- Prof. Satish Chandra, Director CSIR-CRRI delivered a keynote/lecture on 'Overview of Indo HCM' at SVNIT Surat during 3rd RATE-2018 on 12th August 2018.
- Prof. Satish Chandra, Director, CSIR-CRRI delivered a talk on 'New Materials for Road Construction in India' during Road Tech-4th International Conference of Assochem at New Delhi on 4th September 2018.
- Dr. Ravindra Kumar delivered the expert lecture on Vehicular Emission Reduction by Travel Demand Management at NISTADS on 18th September 2018.
- Prof. Satish Chandra, Director, CSIR-CRRI attended RAR 2018 conference at South Africa, September 24-28, 2018.
- Dr. Ambika Behl attended a meeting organised by Department of Environment, Science and Technology, Paryavaran Bhawan, Shimla on 28th Sep. 2018 and addressed the gathering of 60 to 70 engineers of PWD and CPWD on use of waste Plastics in Road Construction.
- An invited talk was arranged on Vector Borne Disease Control on 28th August 2018 in CRRI. Chief District Medical Officer, South East District, Delhi delivered a health talk on the topic "Vector Borne Disease Control" and addressed the Staff about the infections that can transmit infectious diseases between humans or from animals to humans by the bite of infected species, such as mosquitoes, ticks, triatomine bugs, sandflies, and blackflies. The Chief District Medical Officer also told about prevention and control of various vector borne diseases namely Malaria, Filariasis, Kala-azar, Dengue and Japanese Encephalitis (JE).



EVENTS OBSERVED/CELEBRATED

Swachhta Pakhwada (01-15 May, 2018)

The Swachh Bharat Abhiyaan was launched by Hon'ble Prime Minister on 2nd October 2014 to ensure a clean and hygienic India by 2nd October 2019. CSIR-CRRI has undertaken this mission as a responsibility and implemented in the institute.

The action plan for Swachhta Pakhwada from 1st -15th May, 2018 has been undertaken by the Scientists and Staff members of CRRI and they have achieved the goals enthusiastically.

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.

Essay, debate and drawing competitions were organized for the staff members and their wards to bring about the importance and relevance of "Swachh Bharat Mission" in India today.

Promotion of Swachh message through website, banners, poster, hoardings were completed. On the occasion, a tree plantation was also done to make India clean and green for everyone.



National Technology Day (11 May, 2018)

National Technology Day 2018 was celebrated at CRRI-CRRI on Friday, 11th May, 2018. On this occasion, a lecture on National Technology Day was delivered by Prof. (Dr.) Om Vikas, Ex-Director (VC), ABV-IIITM

Gwalior, & Ex-Sr. Director, Ministry of Electronics & IT, Govt. of India & Ex-Counsellor (S&T), Indian Embassy, Tokyo (JAPAN) who was invited as the Chief Guest for the Function.





Anti-Terrorism Day (21 May, 2018)

Anti-Terrorism Day 2018 is observed in the country every year on 21st May to wean away the people specially youth from terrorism and cult of violence by enlightening the sufferings of the common people due to commission of such acts and showing how it is prejudicial to the national interest. A pledge taking ceremony on of the observance of the anti-terrorism day was held on May 21, 2018 at CSIR-CRRI campus and it was attended by scientists and staff members of the Institute.



WORLD ENVIRONMENTAL DAY (5 JUNE, 2018)

World Environment Day 2018 was observed in CSIR-CRRI on 5th June 2018 to raise the awareness about protecting the environment as per United Nation's initiative. On this occasion, Dr. Sanchita Jindal, Advisor, Ministry of Environment & Forests, Govt. of India was the Chief Guest and he had delivered a

lecture on the topic "Role of Transportation Industry in Reducing Vehicular Pollution-Research challenges & opportunities. As a part of this observance, a tree plantation drive was done by Prof. Satish Chandra, Director, CSIR-CRRI.



Chhabeel Celebrations in CSIR-CRRI (18 June, 2018)

दिनांक 18 जून, 2018 को श्री गुरु अर्जुन देव जी के शहीदी दिवस और निर्जला एकादशी पर संस्थान में मीठे पानी और कड़ाह प्रसाद का वितरण किया गया।



International Yoga Day (21 June, 2018)

In compliance of the CSIR circular, CSIR-CRRI celebrated the International day of Yoga by organizing Yoga session in the morning on 21st June 2018, 8.30am onwards. The YOGA session was conducted by Dr. Neelam J Gupta, Principal Scientist & Head, ILT of CSIR-CRRI. Mrs Sunita Chandra graced the occasion by inaugurating the Yoga session with prayer and it was concluded with pledge. The dedication and enthusiasm shown by scientists and staff members were commendable.

The session consisted of Pranayam for focusing on

breathing and relaxation. This was followed by Surya and Chandra Namashkar to generate heat and get the heart rate moving.

This was indeed a great opportunity for the scientists and staff members to participate in Yoga, which aimed at improving our minds focus while relieving stress. This short practice of YOGA for few hours had invigorated the mind and body of Scientists and staff members of our Institute. Later, all participants have committed to make Yoga an integral part of their daily life.



CSIR-CRRI Foundation Day Celebration (16 July, 2018)

CSIR-CRRI Foundation Day was celebrated on July 16, 2018. On this occasion, Dr. Girish Sahni, Director General, CSIR & Secretary DSIR New Delhi was the Chief Guest. Dr. Girish Sahni, DG CSIR & Secretary DSIR addressed all the scientists and staff members during the Foundation Day lecture and emphasized

for more innovative research to fulfill the needs of the society. On this occasion Dr. Girish Sahni, Director General, CSIR & Secretary DSIR released half yearly published CSIR-CRRI News Letter for October 2017 to March 2018.



India Independence Day Celebration (15 August, 2018)

On the occasion of 71th India Independence day, Prof. Satish Chandra, Director, CSIR-CRRI hoisted the National Flag on August 15, 2018 at CSIR-CRRI campus. The function was attended by the scientists

and staff members and also their family members. The devotional and patriotic songs/poems were sung/recited on this occasion by the CRRI staff members and their wards.



CSIR Foundation Day Celebration (26 September, 2018)

CSIR Foundation Day was celebrated on September 26, 2018 at CSIR-CRRI campus. On this occasion, Dr. R. K. Bhandari, Former Director, CSIR-CBRI was the Chief Guest. The function was attended by the Scientists, staff members, other employees and ex-colleagues of CSIR-CRRI. Dr. Kishore Kumar, Chief Scientist, CSIR-CRRI addressed the gathering and highlighted the progress and the journey made by CSIR-CRRI over the years. Various prizes were given away by Dr.

R. K. Bhandari to the winners of various competitions organized by CSIR-CRRI for the children of CSIR-CRRI's employees as a part of this celebration. CSIR-CRRI employees who had completed 25 years of service in CSIR and all those who had retired during September 2017 to August 2018 were also honoured and mementoes were presented to them by the Director, CSIR-CRRI.



MoUs/AGREEMENTS/PATENTS

- Agreement Signed Between CSIR-CRRI and NDA Pothole, New Delhi on 24-04-2018.
- Agreement Signed Between CSIR-CRRI - HEICO, New Delhi for Development of Resilient Modulus Testing System on 10-05-2018.



- MoU signed Between CSIR-CRRI and IIT Tirupati on 11-05-2018.



- A MOU was signed Between CRRI and Trucksvidha-Sarvodaya Infotech Private Limited on 02-07-2018.



- Patent entitled "Design of noise barrier based on different frequencies" has been submitted to IPU, CSIR-HQ for filing/further actions.

VISITORS

- The officials of M/s HANGZHOU SPECIAL AUTOMOBILE CO., LTD., CHINA JINGGONG visited CSIR-CRRI on 02.04.2018 to have formal discussions with the Director, CSIR-CRRI, to explore International R&D Collaboration probabilities with CSIR-CRRI reg. up gradation of their Mobile Bridge Inspection Vehicle (MBIV).



- Delegation of 22 Civil Engineers from Royal Kingdom of Bhutan who are at present undergoing training on various subject of Civil Engineering at the Training Centre of Construction Industry Development Council at Vishwakarma Pratham, Faridabad (Haryana) visited CSIR-CRRI on 04-04-2018 (Forenoon) to acquire knowledge on testing of Engineering Materials through laboratory Demonstration and specialised equipments by the CRRI experts.



- Supreme Court Road Safety Committee visited CSIR-CRRI on 9th April 2018 to review the indigenously developed Car Driving Simulator. Firstly Prof. Satish Chandra, Director, CSIR-CRRI welcomed the committee members, followed by the brief introduction to the Car Driving Simulator by Dr. Neelima Chakrabarty, Sr. Pr. Scientist & Head TES Division, CSIR-CRRI & presentation on Car Driving Simulator for Indian Conditions was done by Dr. Errampalli Madhu, Pr. Scientist, Head TP Division, CSIR-CRRI. Members of the Industrial partner Faros Simulations Pvt. Ltd were also present and a discussion was held for possible commercialization of the product /technology.

Demonstration of the simulator was carried out at Simulator Lab in which different learner driving and advance driving modules with different environmental conditions (e.g. day time& night time) and road stenches (e.g. city roads, highway, expressway, hill roads under typical Indian road conditions and driving test sections namely e.g. "S","H" Curve, acute angle, hairpin bends and Steep Ascending/Descending while addressing different issues of the driver characteristics like drivers brake reaction time during sudden appearance of real time (graphic) hazards e.g. dog; pedestrians; hand cart puller; two wheeler etc.

Different Psycho Motor Tests were also demonstrated which are globally accepted compulsory tests for applicants of learner license e.g. Visual Acuity, Glare Test, colour vision test, judgment of speed and distance test, Complex reaction time test. User Data Management & Driving Simulator Report was shown by Dr.Ch. Ravi Sekhar, Principal Scientist of Transportation Planning Division, after this session was concluded.



- A delegation from Canada along with officers from Govt. of Nepal visited CSIR-CRRI on 18-06-2018.



- A delegation from Uganda visited CSIR-CRRI on 09-08-2018.



- A Delegation from Indonesia visited CSIR-CRRI on 21-08-2018.



TRAINING PROGRAMMES

- CSIR-CRRI conducted Five Days Customized Training Programme for Border Road Organisation young Officers on "Capsule on Airfield Engineering" from 02-06 April 2018. The training programme was attended by 14 participants from Border Road Organization, Govt. of India.



- CSIR-CRRI conducted Five Days Training Programme on "Quality Assurance, Health Assessment and Rehabilitation of Bridge" for the Engineers of various organisations (Like CIDCO, RITES, PMGSY, PWD, CGRDA etc.) from 25-29 June 2018. The training programme was attended by 30 participants from various parts of India.



- CSIR-CRRI conducted Five Days Training Programme on "Traffic Engineering & Road Safety Audit" from 16-20 July 2018. The training programme was inaugurated by Prof. Satish Chandra, Director CSIR-CRRI and it was attended by 36 participants from various parts of India.



- CSIR-CRRI conducted Five Days Training Programme on "Design, Construction and Quality Control in Flexible Pavement" from 06-10 August 2018. The training programme was inaugurated by Prof. Satish Chandra, Director CSIR-CRRI and it was attended by 29 participants from various parts of India.





- CSIR-CRRI conducted Two Days Customized cum Regular Training Programme on "Landslide Mitigation & Detailed Project Report Preparation" from 06-07 September 2018 for Engineers of NDMA (National Disaster Management Authority) & various other organisations in India. The training programme was inaugurated by Prof. Satish Chandra, Director, CSIR-CRRI and it was attended by 21 participants from NDMA & 11 participants from various other organisations.



- CSIR-CRRI conducted Five Days Training Programme on "Design, Construction, Quality Control and Maintenance of Rigid Pavements" from 10-14 September 2018. The training programme was inaugurated by Prof. Satish Chandra, Director CSIR-CRRI and it was attended by 17 participants from various parts of India.



NEW HoD/APPOINTMENTS/TRANSFERS

Heads of Divisions/Sections

List of Divisional/Section Head & Section Renamed with effect from 01/05/2018

Dr. P.S. Prasad, Head Geotechnical Engineering (GTE)
 Dr. Sangita, Head Flexible Pavement (FP)
 Dr. Rakesh Kumar, Head Rigid Pavement (RP)
 Shri Pradeep Kumar, Head Pavement Evaluation (PE)
 Subhash Chand, Head Traffic Engineering & Safety (TES)
 Dr. Ravinder Kumar, Head Transportation Planning & Environment (TPE)
 Shri G.K. Sahu, Head Bridge Engineering and Structure (BES)
 Dr. Neelam J. Gupta, Head, Information, Liaison and Training (ILT)
 Dr. B.K. Durai, Advisor, R&D and Business Development
 Shri P.V. Pradeep Kumar, Head, Planning, Monitoring & Evaluation (PME)
 Shri Ashok Kumar, Incharge Horticulture
 Shri Naresh Kumar Sharma, Coordinator, Mechanical and Transport (MAT)

Shri Vivek Dubey, Head, Computer Centre and Networking (CCN)

Ms. Neera Aggarwal, Head Documentation and Library Services (DLS)

Shri A.K. Jain Head, Maintenance Division & Quality Management Service (MD) & (QMS)

Shri A.K. Jain Management Representative (MR)

Shri A.K. Tripathi, Head, Maharani Bagh Staff Quarter (MBSQ)

Dr. Rajeev Goel, Coordinating Officer, MBSQ and Horticulture

Administration (ADM)

Shri Anjum Sharma, Controller of Administration (COA)

Shri Padam Singh, Senior Controller of Finance & Account (Sr, CoF&A)

Shri Tariq Badar, Controller of Store & Purchase (CoS&P)

Shri Avanish Kumar, Finance & Account Officer (F&AO)

WELCOME ON JOINING CSIR-CRRI

- Sh. Jitender Kumar Giri joined as Sr. Tech. Officer (2) w.e.f. 17th April 2018 (Transferred to CSIR-CRRI from CSIR Head Quarter, New Delhi)
- Sh. R.D. Chinchulkar joined as Sr. Store & Purchase Officer w.e.f. 24th April 2018 (Transferred to CSIR-CRRI from CSIR-AMPRI, Bhopal)
- Sh. Om Prakash Yadav joined as Sr. Tech. Officer (2) w.e.f. 14th June 2018 (Transferred to CSIR-CRRI from CSIR-CIMFR, Dhanbad)

WELCOME ON NEW JOINING CSIR-CRRI

S. No.	Name of the Employee	Designation	Date of Joining
1	Sh. Nimish Mishra	Junior Secretariat Assistant (G.)	05.04.2018
2	Sh. Anirudh Kumar	Junior Secretariat Assistant (G.)	27.04.2018
3	Sh. Aman Malik	Junior Secretariat Assistant (F&A)	29.06.2018

Retirements

Following staff members have retired from serviced of the Institute during the period. CSIR-CRRI Welfare Committee organized functions to bid all of them a grand farewell.

Name, Designation, Date of Retirement



Shri S.K. Biswas
Sr. Technician
on 27-04-2018



Shri Balbir Singh
TSS
on 27-04-2018



Smt Sushma Behl
Lab. Asstt.
on 27-04-2018



Shri Jamdaar Mehto
Lab. Asstt.
on 31-05-2018



Shri Y.V. Rao
Principal Tech. Officer
on 31-05-2018



Shri Jai Prakash Shukla
T.S S
on 29-06-2018



Shri Sudhir Mathur
Chief Scientist
on 31-07-2018



Shri C.M. Kukreti
Asst.(Gen.) Gr.II
on 31-07-2018



Mrs. Neelam Malik
Asst.(F&A) Gr.I
on 31-07-2018

OBITUARY



With profound grief and deep sorrow, we inform the sad demise of our beloved Prof. (Dr.) D.V. Singh, former Director, CSIR-CRRI and formerly Vice Chairman, All Indian Council of Technical Education, Vice Chancellor, University of Roorkee and Director, IIT Roorkee, who left for his heavenly abode on July 20 2018. We deeply mourn the death of Prof. (Dr.) D.V. Singh and convey our heartfelt condolences to the bereaved family. We pray to the Almighty that may his noble soul rest in peace and be blessed with the eternal peace.

Hindustan: 04.10.2018: GDA has already awarded the Project pertaining to RFQ cum RFP Documents Preparation & Proof Checking of Structural Designs & Drawings for the subject Elevated Road to CRRI

24-member panel to meet daily for 2 weeks to resolve waste problem

SC Accepts LG Proposal; Committee To Have Representatives From Govt, Corpsns

Amit Anand, Choudhary
@timesgroup.com

New Delhi: The Supreme Court on Wednesday approved the setting up of a high-powered 24-member committee comprising senior bureaucrats, scientists, members from civil society and directors of Swachh Bharat Mission to find a solution to the problem of processing and disposing of solid waste in the capital.

A bench of Justices Madan B Lokur, S Abdul Nazeer and Deepak Gupta accepted the proposal of Delhi's lieutenant governor to constitute the committee to devise ways to deal with the crisis by examining all aspects of solid waste management in Delhi, including cleaning up the dumpsites in Ghazipur, Bhalswa and Okhla. It asked the committee to hold brainstorming sessions on a daily basis for two weeks to come up with a solution.

Additional solicitor general Pinky Anand told the bench that the committee would be headed by the principal



At present, out of 10,000 tonnes of solid waste generated in Delhi per day, only 5,500 tonnes is scientifically disposed of in three waste-to-energy plants.

Two new plants with

capacity of 1,500 tonnes per day are being set up in Bhalswa and Tekhand.

Capacity of the Ghazipur plant being enhanced to 1,500 tonnes per day and Okhla plant by 500 tonnes.

All these projects to be completed by August 2020, LG tells court.

by the principal secretary and he should be replaced by a bureaucrat one rank below him. Although the government suggested that the committee would hold meetings twice a week, the court, however, said it should meet on a daily basis from 10 am to 12 pm for at least two weeks in view of the gravity of the crisis.

The court passed the matter for Thursday for passing formal order.

At present only 5,500 TPD (tonnes per day) out of 10,000 TPD of solid waste generated is scientifically disposed of in three waste-to-energy plants. Two new plants with a capacity to handle 3,500 MT are being set up in Bhalswa and Tekhand.

The capacity of the existing plant at Ghazipur is being enhanced to 1,500 MT and at Okhla, the capacity is being enhanced by 500 TPD. The LG told the court that all these projects will be completed by August 2020 after which no untreated garbage would be dumped in the landfill.

secretary of the urban development department of Delhi government and would also consist of heads of civic bodies of New Delhi, south Delhi, north Delhi and east Delhi areas. The panel also includes professor Manoj Dutt from IIT Delhi, Swachh Bharat Mission director VK Jindal, directors of National Environmental Engineering Research

Institute and Central Road Research Institute and scientist Krishna Kanth from the Union government's department of science and technology. Adhering to the apex court's suggestion, the government also included six members from resident welfare associations of different colonies.

Senior advocate Colla

Gonsalves, who is assisting the court as amicus curiae, also suggested seven names for inclusion in the committee. But the bench approved five names and asked Anand to make them part of the committee.

Holding that the senior bureaucrats may not be able to devote time for the meetings, the court said the committee should not be headed

Bid to murder Manipur CM foiled

20-day period from tomorrow, #6

Markan Trophy, #6

UT to reduce road level to check flooding

Teams from Central Road Research Institute, New Delhi, begin study from Madhya Marg

RAMKRISHNAN UDAYSHYR

CHANDIGARH, MAY 15: Central Road Research Institute (CRRI), New Delhi, has started a study to reduce the level of roads in the city to prevent flooding in the rainy season.

Sources said the Engineering Department had roped in the CRRI to carry out the survey. Teams from Madhya Marg, which has been facing flooding during the rains, causing traffic jams on one of the most busiest roads of the city.

An officer said the level of the city roads had increased over the years due to re-surfacing. He said due to the increase in the level of the roads, "rainwater gets accumulated during the rainy season and flows into markets and houses, leading to flooding of the area".

Mukesh Anand, Special Secretary in the Engineering Department, said Madhya Marg mostly faced flooding during the rains. He said a team of scientists would investigate the road level and submit its recommendations on how to reduce the level, leading to



A stretch being dug up for the CRRI study, and (right) vehicles stuck in a traffic jam because of it on the road separating Sector 8 and 18 on Madhya Marg in Chandigarh on Thursday.

INDIAN PHOTOGRAPHY SERVICE

the level using the latest technology. The study started by the

be confirmed on the other side of the road on Friday. An official said due to the



Published by:

Prof. Satish Chandra, Director, CSIR-CRRI, New Delhi

Editor:

Dr. Neelam J Gupta, Principal Scientist & Head (ILT)

Editorial Assistance:

Dr. H. Lokeshwor Singh, Technical Officer, Sh. R.C. Pardesi, Technical Officer (Retd.) & ILT Staff

Printed by: Pushpak Press Pvt. Ltd., New Delhi-110020