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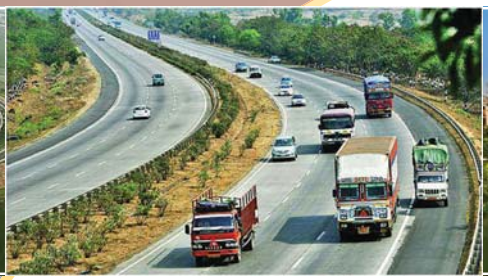
CSIR - Central Road Research Institute
सीएसआईआर - केन्द्रीय सड़क अनुसंधान संस्थान

CSIR CRRI Newsletter

सीएसआईआर-सीआरआरआई समाचार पत्रिका



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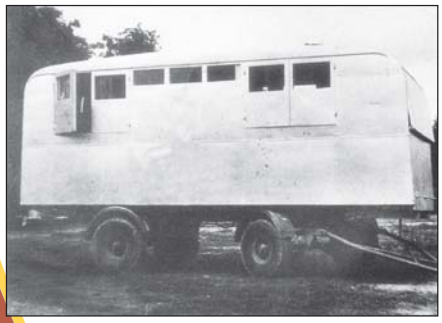
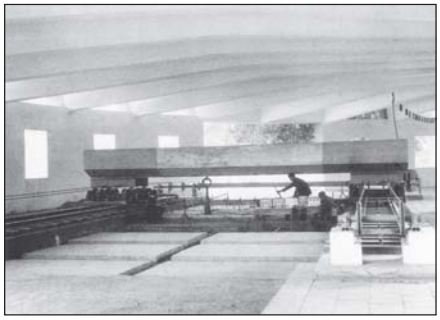
DOWN THE MEMORY LANE - PART II

Scientists of CRRI got engaged in two important areas of pavements during early 1960s. These were Quality control during construction and investigation of premature failure of pavements. A mobile laboratory equipped with necessary equipments and apparatus was made at the institute level for field testing of materials during construction. This mobile lab was used in several projects in Delhi and other neighboring states.



Mobile lab made during 1960s for field tests on materials

This was the period when research on use of alternate materials and new materials in road construction was given a great emphasis at the national level. To meet the challenges of testing of these unconventional materials in different layers of a pavement, a heavy duty test bed facility was created in CRRI for testing of semi-field pavement sections. This facility was capable of testing a pavement section (flexible or rigid) in different test positions of a test area measuring 15 m in length and 6 m in width. Initially, it was designed and fabricated for applying a static load of 40 Tonne on the pavement section. Later alternating machine for tests with repetitive loading was also added to study the behavior under repetitive loading.



Heavy duty test bed for facility created during 1960s

This test bed was used to carry out studies on flexible and rigid overlays for thin concrete pavement also.

Another landmark study conducted in CRRI was on stresses in concrete

pavements for rationalizing the design concepts. An all India study was conducted at a number of locations in the country on especially constructed concrete slabs of different thicknesses to capture the maximum temperature differentials. The study continued for a number of years and results of these study helped formulation of IRC design guidelines on concrete pavements published in 1974.

The institute started Refresher Courses for senior and junior highway engineers in 1962, with a view to disseminate the results of research and the latest knowledge among the highway professionals in the country. Separate courses were launched for senior and junior highway engineers as per their requirements. This activity of training the manpower has now become integral part of the institute's mandate.

R&D HIGHLIGHTS

Evaluation of Selected NDMC Roads and Needed Remedial Measures

New Delhi Municipal Council (NDMC) awarded the work for detailed evaluation of 36 roads falling under its jurisdiction. The field work for suggesting maintenance and rehabilitation measures is in progress. Few photographs of field studies conducted on roads are shown below.

Roughometer-III used for the Study

Structural and Functional Evaluation on Jetpur - Gondal - Rajkot Road Section of NH-27

The Institute has recently conducted structural and functional evaluation on Jetpur - Gondal - Rajkot Road section of NH-27, from Km. 117+600 to Km. 184+700 under the project sponsored by West Gujarat Expressway Limited. The evaluation data will be used for deciding the Maintenance and Rehabilitation strategies.

Functional and Structural Evaluation of NH-27

Improvement/Widening of Udaipur-Sabroom Section of NH-44, Tripura under SARDP-NE Phase 'A' - Cementitious Sub-base and Base-course

Indian road assets have been growing at fast pace which require huge natural resources. Especially for North East Sector, roads are the nucleus of economic development and play important mode of travel in the hilly areas as other modes are either too expensive or difficult to construct. To keep the seamless balance, new construction methodology could be adopted for which the Indian Roads Congress (IRC) has already published the pavement design guidelines (IRC: 37-2012) which incorporates many options to optimize the new pavement design. Looking into it, this project for improvement / widening to two lane with paved shoulder of Udaipur - Sabroom section of NH- 44 in the state of Tripura is ongoing wherein M/s Oriental Structural Engineers Pvt. Ltd. (OSEPL) is the builder and National Highways and Infrastructure Development Corporation Limited (NHIDCL) is the client. Under this project cemented sub-base consisting of brick aggregates and use of foamed bitumen / bitumen emulsion treated RAP / aggregate as base layer over cemented sub-base is being constructed. CSIR-CRRI is looking as consultant for NHIDCL for the new construction method. The project is in progress.

Mosaic showing homogenous mix of ingredients

General Condition of Cement Treated Sub-base (CTSB)

Close view of Foamed Stabilized Mix

View of Foamed Plant

Construction Stage Road Safety Audit of Sambalpur - Rourkela Section of SH-10: 4th Visit (Km 4/900 to Km 167/900)

Sponsored by Odisha Public Works Department (OWD), Government of Odisha,

Odisha Public Works Department (OWD), Government of Odisha, sponsored the study to CSIR - CRRI to conduct the Road Safety Audit (RSA) starting from the Design Stage RSA followed by periodical RSA during Construction Phase culminating with the Pre- Opening Stage RSA during the four laning of Sambalpur - Rourkela section of SH-10 from Km 4.900 to Km 167.900 in the state of Odisha. This study was rightly initiated by OWD aimed at reducing the road crashes on the Sambalpur - Rourkela Section of SH-10 as well as identification of shortcomings / inadequacies with a view to improve / enhance the safety of all types of road users so as to suggest appropriate safety measures during the ongoing construction phase leading to Commercial Opening Operations (COD) phase of the Project Corridor and beyond.

Accordingly, CSIR - CRRI study team visited in the month of June 2017 and critically studied the Sambalpur - Rourkela Section of SH-10 through the conduct of exhaustive RSA during the ongoing construction stage and identified the existing deficiencies on the study stretch conforming to IRC: SP-88 (2010) titled, "Manual on Road Safety Audit".

This report covers the findings that emerged from the 4th Construction Stage RSA visit conducted on the project corridor during the ongoing construction phase. The study team critically reviewed the existing inadequacies in Work Zone Traffic Management Plans (WTMPs) and Other Safety measures like absence of Object Hazard Markers (OHM), Parapet wall Paintings at CDs / Minor Bridges and major Bridges, Frequent Median Openings, Crash Protection Measures - Requirement and Placement of Metal

Beam Crash Barrier (MCB), Safety Measures at Intersections, Median Gaps and Access roads, Drainage system and Drainage covers, Safety Measures at Toll Plazas, Road signs, Road markings, Road studs, Service roads, Plantations, Safety measures near industrial units like M/s. Bhushan Steel area, Edge drops at Construction Zone areas, Personal Protective Equipment (PPE), Emergency Telephone numbers, Safety Tips to School / residents / inhabitants along the project corridor. It is highly recommended that the suggested measures in this report shall be implemented as per the recommendations which are expected to help in mitigating the road crashes and thus enhance road safety during the ongoing construction and COD. It is highly recommended that the suggested measures in this report shall be implemented as per the recommendations which are expected to help in mitigating the road crashes and thus enhance road safety during the ongoing construction as well as during the Commercial Opening Date (COD) operative stage. It is recommended that chainage compliance report shall be sent to CSIR - CRRI team by M/s/. L &T - SRTL well before the CSIR - CRRI team undertakes the COD audit as and when the request of OWD is made. Basically, this RSA study is carried with the basic motto 'Prevention is better than Cure' conforming to IRC: SP-88 (2010) titled, "Manual on Road Safety Audit". Considering the above, this RSA study was primarily focussed to decide the priorities for expenditure and the associated costs and benefits of a treatment and its impact on risk on the road users.

Hence the evolved recommendations in this report are intended to show application of principles of RSA and advice to implement best safety practices. These may be used with discretion and judgment and to be complemented by the experience of the concerned OWD site engineer and M/s. SRTL officials. Some of the typical safety concerns observed durring the RSA are presented in Figures 1 to 6. For each of the above, action plan has been conceived and presented in the report.

Figure 1: At Km.38/600, U -turn provision recommended; Edge drop on LHS observed

Figure 2: At Km.38/900, No safety measures adopted on the median to cut the glare

Figure 3: At Km.39/100, View in front of M/s. Bhushan Steel Gate No.2, where roundabout is recommended considering the heavy truck traffic from this Gate No.2

Figure.4: At Km.83/600, at some locations, dilapidated signs and redundant signs were observed, The same shall be replaced as per IRC: 67 (2012) and removed to avoid confusion to the road users.

Figure 5: At Km.30/800, At Sharp Curves, Urban Areas, No overtaking signs are needed as per IRC: 67 (2012)

Figure 6: At Km.36/500, Directional destination sign placed as per IRC: 67 (2012), placed only few locations; Recommended to be replicated at all such locations

World Bank Research Project on "Megacity Logistics: Metrics, Tools and Measures for Sustainability (MEGALOG)" - On-going

The research project on "Megacity Logistics: Metrics, Tools and Measures for Sustainability (MEGALOG)" funded by the World Bank Group which is to be carried out this institute in association with TNO, Netherlands and TU Delft, Netherlands. The objective of the project is twofold:

1) Capacity development for R&D in the area of sustainable logistics for cities, in two areas:
   - Metrics for measurement of city logistics sustainability in liveability and logistics efficiency
   - Tools for policy design
2) Development, transfer and application of decision support system specifications for public policies and strategies related to sustainable megacity logistics.

An important goal of the project is to create an impact in practice. An extensive pilot study is carried out for New Delhi with a transferable modelling approach. The city of Delhi i.e. National Capital Territory of Delhi (NCTD) has been selected as study area for this study.

The initiative will be deployed in three work packages

WP1 – Sustainable city logistics metrics

WP2 – Knowledge transfer between R&D institutes for capacity development,

WP3 – Decision Support Systems

The data collection task has been completed which include the following:

- *Outer Cordon Freight Traffic Volume Count Survey @ 10 Locations for 24-hour duration*
- *Outer Cordon Freight Characteristics Questionnaire Survey @ 10 Locations (collected 8391 Samples)*
- *Focal Point Freight Traffic Volume Count Survey @ 20 Locations for 24-hour duration*
- *Focal Point Freight Characteristics Questionnaire Survey @ 20 Locations (collected 10091 Samples)*
- *Traffic Volume Counts @ 5 Location for 24-hour duration*
- *Journey Speed Survey for Major Arterial Roads for a length of 413 km*
- *Road Network and Zone Data of Delhi*
  - *Shape files of Zones and Road Network*
  - *Socio-Economic and Land-use Parameters of Zones*

The data collection through interviews using predesigned questionnaire at Outer Cordons and Focal Points haven been carried out and the glimpses of data collection is shown in the Figure 1. The collected data has been analysed and it was found that about 1.2 million vehicles entering and exiting Delhi in a day and the freight vehicles are about 100 thousand in that as shown in Figure 2. The traffic has increased with an annual growth of about 3% compared to 2009. The passing through freight traffic is about 21% which was 18% in 2009 as shown in Figure 2. The overall traffic composition is shown in Figure 2 and the freight vehicles consist of about 10% at outer cordons as shown in Figure 3.

Figure 1: Glimpses of Data Collection through interviews using Questionnaire at Outer Cordons

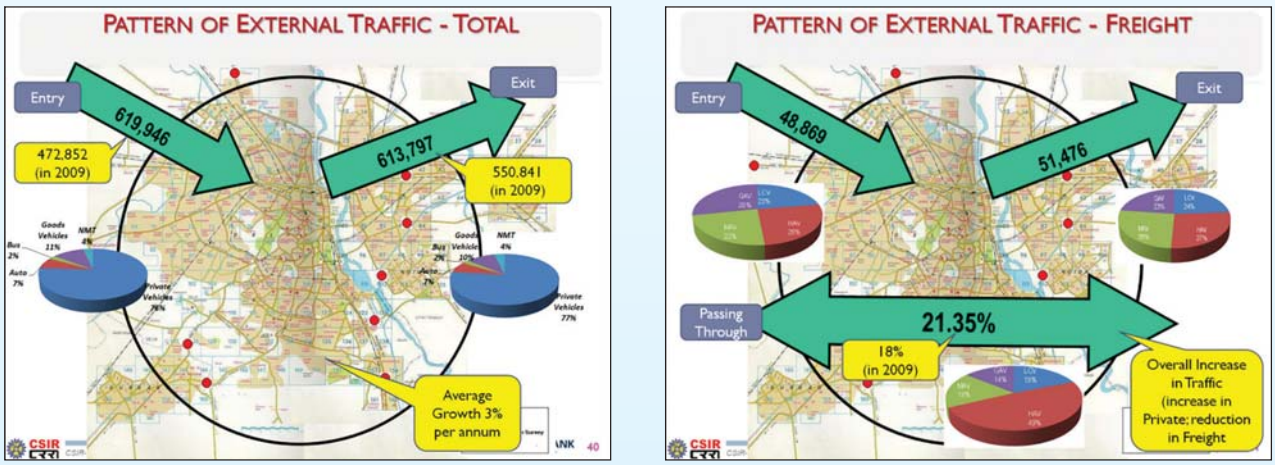


Figure 2: Pattern of External Traffic at Outer Cordon Locations of Delhi

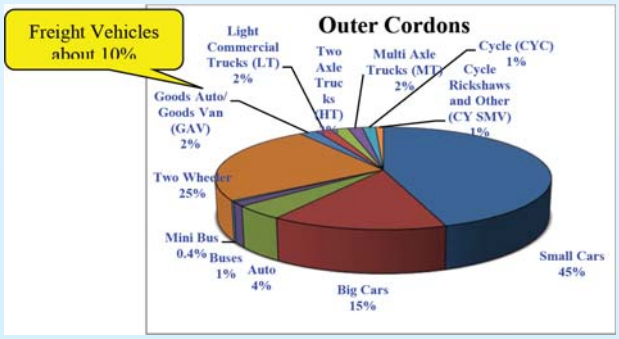


Figure 3: Traffic Composition at Outer Cordon Locations of Delhi

The freight traffic composition observed at outer cordons and within the city has been compared and presented in Figure 4. From the Figure 4, it can be seen that the share of heavy duty vehicles namely HT and MT is less inside city (about 20%) compared to outer cordons (about 50%) and light duty vehicles are more within the city compared outer cordons. The Age distribution of freight vehicles within the city are given in the Figure 5 along with outer cordons. It was found that the mean age is almost same at outer cordons and within the city varying between 4.5-5.0 years and the share of 10 year old vehicles within the city is ranging from 1 to 6% and 5 to 9% at outer cordons.

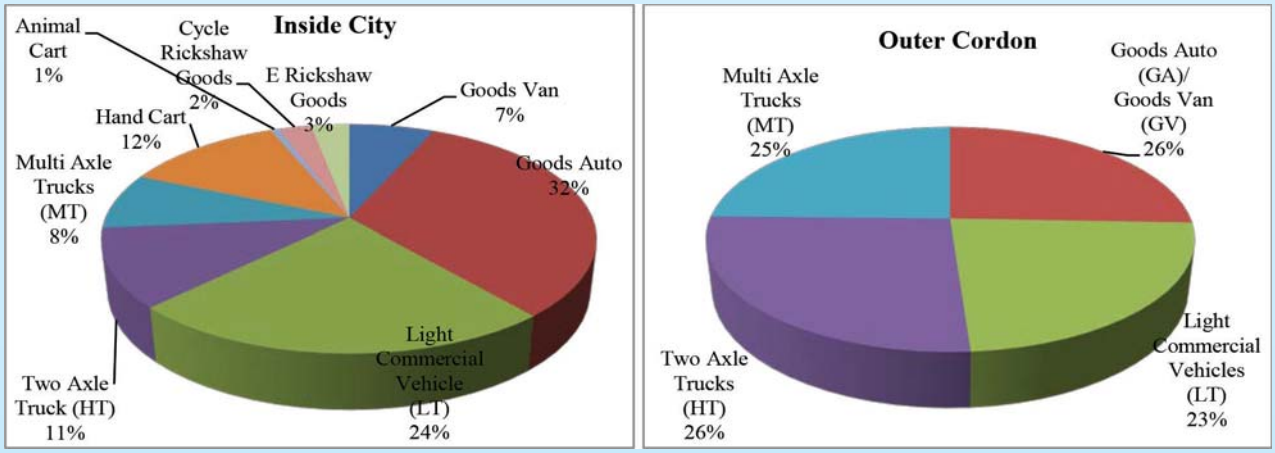
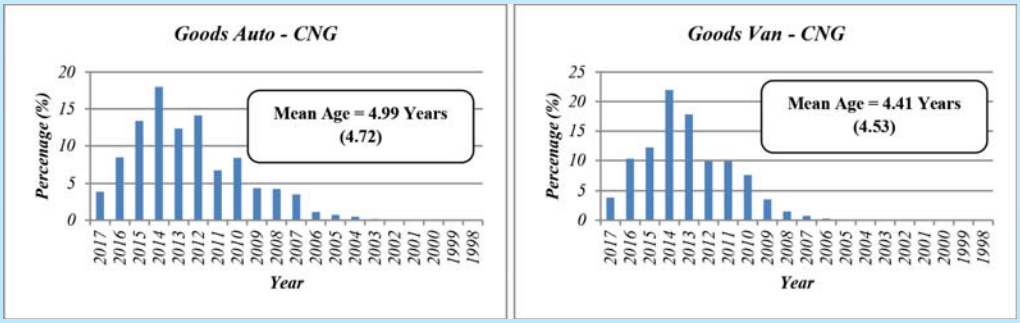


Figure 4: Freight Traffic Composition at Outer Cordons and Within the city of Delhi



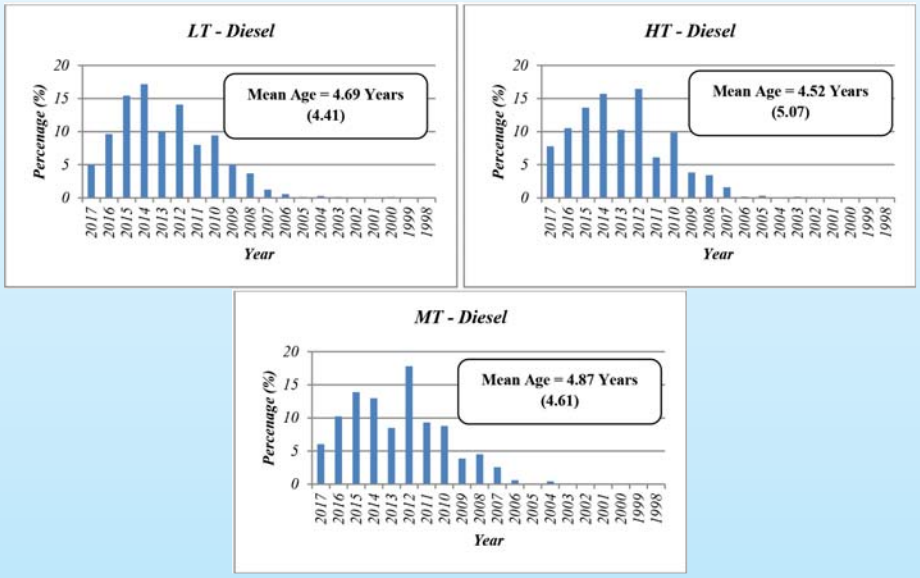


Figure 5: Age Distribution of Freight Vehicles within the city of Delhi (values in parenthesis shows for Outer Cordons)

New Project: Assessment of Odisha Road Network Using Modern Data Collection Techniques such as Automated Road Survey System and Falling Weight Deflectometer for Asset Management of Odisha P.W.D. Roads

The Works Department of Government of Odisha has developed Odisha Road Asset Management System (ORAMS) for the State Road Network of Odisha. The envisioned system is to facilitate in rationalizing the decision making process in the allocation of resources in road sector in order to make the best use of public funds in preserving the road network at an acceptable level of serviceability.

To fulfill the above objective Works Department, Odisha has awarded the work for collection of Road Inventory, Pavement Condition and Deflection Data using modern tools and technologies like **Automated Road Survey System and Falling Weight Deflectometer** in the State of Odisha. The field work will be started very soon.

Automated Road Survey System

Falling Weight Deflectometer

Design and Evaluation of Pavement Quality Concrete mixes Using Ground Granulated Blast Furnace Slag as Partial Replacement of Cement

Ground Granulated Blast Furnace Slag (GGBFS) is a fine material obtained by grinding granulated Blast furnace slag into powder form (Photo 4). Glassy granulated slag is produced by rapid cooling or quenching in water of molten slag generated in the Blast furnace during metallurgical process of iron and steel. Granulated slag is then dried and ground into a fine powder called as GGBFS. The glass content of slag suitable for blending with Ordinary Portland Cement (OPC) generally varies between 90 and 100% and depend on the cooling method and the temperature at which

cooling is performed. Higher the glass content higher is the reactivity of slag.

A laboratory study was performed for the utilization of ground granulated blast furnace slag as partial replacement of ordinary Portland cement in pavement quality concrete mixes so that it can be used for the construction of concrete roads. The lime reactivity of GGBFS was determined as 15.3 MPa. A control mix was designed for M40 Grade concrete with 400 kg/m^3 cement and 0.4 water-cement ratio. Mixes containing different amount of grounded slag were then proportioned replacing cement from 10 to 60 %. Samples were prepared and tested for compressive strength, flexural strength, drying shrinkage, and abrasion resistance.

Analysis of test data led to the following conclusions:

- Workability of concrete mixes do not change with the use of any amount of GGBFS. Use of suitable plasticiser can take care of the workability of the mix without changing the water requirement.
- Both short term (7 & 28 days) and long term (90 days) compressive as well as flexural strength of concrete is increased when cement is partially replaced by GGBFS up to a level of 40%. When 50 % cement is replaced by GGBFS, the strength of the concrete remains almost same.
- Abrasion resistance of M40 Grade PQC containing different amount of GGBFS was observed to be adequate enough for its use in concrete pavement construction.
- Drying shrinkage of concrete reduces with the increase in GGBFS content. Thus, concrete containing GGBFS is comparatively more suitable than conventional concrete for road construction

The study recommended that GGBFS can be used as partial replacement of OPC up to 50 % without compromising the requirement of short term and long term strength.

Ground Granulated Blast Furnace Slag

Lime Reactivity Cubes

राजभाषा गतिविधियाँ

सीएसआईआर-केंद्रीय सड़क अनुसंधान संस्थान में हिंदी पखवाड़ा 2017 का आयोजन

सीएसआईआर-केंद्रीय सड़क अनुसंधान संस्थान (सीएसआईआर-सीआरआरआई), नई दिल्ली में दिनांक 14 सितंबर 2017 को हिंदी दिवस का आयोजन किया गया। इस उपलक्ष्य में दिनांक 29 सितंबर 2017 तक चलने वाले हिंदी पखवाड़े का उद्घाटन भी 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। वरिष्ठ प्रशासन नियंत्रक श्री ओ उम्मन पणिक्कर ने हिंदी दिवस 14 सितम्बर के महत्त्व के बारे में बताया । इस अवसर पर प्रो. हरीश नवल, प्रसिद्ध व्यंग्यकार ने मुख्य अतिथि के रूप में समारोह की गरिमा बढ़ाई। अपने भाषण में उन्होंने देश-विदेश में हिन्दी के

प्रचार-प्रसार के लिए की गई यात्राओं एवं अध्यापन के दौरान प्राप्त हुए अपने अनुभवों को साझा किया। मुख्य अतिथि ने सरकारी कार्य में हिंदी के महत्व पर बल देते हुए हिंदी को एक दुरुह भाषा से इतर सुगम, सुपाठ्य भाषा बनाने पर बल दिया तथा हिंदी को लोकप्रिय बनाने के लिए अन्य भारतीय भाषाओं में उपलब्ध विशाल शब्द संपदा का उपयोग बढ़ाने की आवश्यकता बताई।

हिंदी पखवाड़े के दौरान संस्थान के कार्मिकों के लिए विभिन्न हिंदी प्रतियोगिताओं यथा हिंदी स्लोगन प्रतियोगिता, निबंध लेखन, तकनीकी लेख प्रतियोगिता, श्रुतलेख प्रतियोगिता, हिंदी प्रश्नोत्तरी तथा समाचार वाचन प्रतियोगिता का आयोजन किया गया। पखवाड़े के अंतर्गत संस्थान के अनुभागों और प्रभागों के हिंदी कार्य की समीक्षा की गई। हिंदी प्रतियोगिताओं में संस्थान के प्रशासनिक एवं तकनीकी वर्ग के विभिन्न श्रेणी के कर्मचारियों ने बढ़ चढ़कर भाग लिया। संस्थान के अनुसंधान एवं विकास कार्यों में हिंदी के प्रयोग में वृद्धि के उद्देश्य से 'ईंधन की खपत पर सड़क और यातायात की स्थिति का प्रभाव' विषय पर हिंदी में एक तकनीकी प्रस्तुतीकरण भी रखा गया। पखवाड़े के दौरान इसी क्रम में विशिष्ट हिंदी व्याख्यान भी रखा गया जिसमें पद्मश्री से सम्मानित नेत्र विशेषज्ञ डॉ. एस महिपाल सचदेव को आमंत्रित किया गया। उन्होंने आँखों से जुडी विभिन्न उपयोगी जानकारी दी, जिससे संस्थान के सभी कार्मिक लाभान्वित हुए।

हिंदी पखवाड़े के दौरान संस्थान में हास्यकवि सम्मेलन भी आयोजित किया गया, जिसमें श्री चिराग जैन एवं सुश्री मनीषा शुक्ला को हास्य कवि के रूप में आमंत्रित किया गया। हास्य कवि सम्मेलनों के चिर-परिचित हस्ताक्षर आमंत्रित कवियों ने अपनी कई हास्य कविताएं सुनाई, जिनका संस्थान के कार्मिकों ने भरपूर आनन्द उठाया। इस दौरान संस्थान के कार्मिकों ने अपनी स्वरचित कविताएं भी प्रस्तुत की।

हिंदी पखवाड़े का समापन एवं पुरस्कार वितरण समारोह दिनांक 29 सितंबर 2017 को आयोजित किया गया। 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 व 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। उन्होंने आशा व्यक्त की कि पखवाड़े के दौरान आयोजित हिंदी प्रतियोगिताओं में कार्मिकों की उत्साहपूर्ण प्रतिभागिता, हिंदी कार्य में वृद्धि के रूप में परिलक्षित होगी।

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, सांत्वना पुरस्कार एवं प्रशस्ति प्रमाण-पत्र प्राप्त करने वाले कर्मचारियों को भी प्रमाण-पत्र एवं प्रदान किया प्रोत्साहन राशि का 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 संक्षिप्त रिपोर्ट प्रस्तुत की और समापन समारोह का सफलतापूर्वक संचालन किया।

आमंत्रित वार्ता: आंखों की देखभाल संबंधी हिंदी में विशेष व्याख्यान

संस्थान के कार्मिकों में राजभाषा हिंदी के प्रति सकारात्मक वातावरण का निर्माण करने के लिए प्रत्येक तिमाही में हिंदी व्याख्यान का आयोजन किया जाता है। इस श्रृंखला में स्वास्थ्य से संबंधित जागरूकता उत्पन्न करने के लिए दिनांक 21 सितंबर 2017 को संस्थान में डॉक्टर महिपाल एस. सचदेव (पद्मश्री) का 'आंखों की सुरक्षा, संबंधित रोग और उनके उपचार' विषय पर हिंदी में व्याख्यान का आयोजन किया गया। अखिल भारतीय आयुर्विज्ञान संस्थान से ग्रेजुएट एवं पोस्टग्रेजुएट स्तर की मेडिकल शिक्षा पूर्ण करने वाले डॉ महिपाल एस. सचदेव ने सरल शब्दों में नेत्र विज्ञान से

जुड़ी विभिन्न जानकारी दी। उन्होंने आंखों की कार्यशैली के बारे में बताया, साथ ही आंखों से संबंधित सर्वाधिक सामान्य समस्याओं की अत्यंत उपयोगितापूर्ण जानकारी भी दी। डॉक्टर महिपाल ने आंखों में जलन, खुजली, पलके गिरना, पलकों में सीकरी होना इत्यादि की जानकारी देते हुए कंजक्टिवाइटिस की समस्या को भी रेखांकित किया।

डॉ. महिपाल ने अपने व्याख्यान में बताया कि भारतवर्ष में 80% तक आंखों की समस्या रासायनिक एवं व्यवसायिक कारणों से उत्पन्न हुई है। उन्होंने मोतियाबिंद – सफेद मोतिया, काला मोतिया, भेंगापन, निकट दृष्टि दोष, दीर्घ दृष्टि दोष इत्यादि समस्याओं पर भी प्रकाश डाला। साथ ही, इन सामान्य रोगों के उपचार के बारे में शल्यक्रिया उपचार तथा शल्यक्रिया रहित उपचार की भी जानकारी दी गई। उन्होंने सरल एवं सुविधाजनक माध्यमों से चश्मा हटाने की विधियों को अपने व्याख्यान में रेखांकित किया। डॉक्टर महिपाल एस. सचदेव ने उपचार के रूप में नवीनतम विधियों से मोतियाबिंद दूर करने के बारे में बताया जिसमें श्रम एवं धन की बचत होती है तथा जो सुरक्षित, तीव्र एवं अधिक सुविधाजनक है। इस अवसर पर सभागार में उपस्थित संस्थान के अनेक कार्मिकों ने नेत्र से संबंधित अपनी शंकाएं डॉक्टर महिपाल के समक्ष रखी और उन्होंने विस्तार से इनका समाधान किया।

हिंदी टेबल कार्यशाला (दिनांक 26 एवं 27 जुलाई 2017) की रिपोर्ट

संस्थान में दिनांक 26 एवं 27 जुलाई 2017 को दो दिवसीय हिंदी टेबल कार्यशाला का आयोजन किया गया। इसके अंतर्गत संस्थान के प्रशासनिक अनुभागों में हिंदी में किए जा रहे कार्य की समीक्षा की गई तथा सरकारी कामकाज में हिंदी के प्रयोग में वृद्धि करने के लिए सुझाव दिए गए । प्रत्येक अनुभाग में सरकारी कामकाज में हिंदी की मात्रा को बढ़ाने तथा कर्मचारियों को हिंदी में काम करने में आने वाली कठिनाइयों के विषय में अनुभाग अधिकारी एवं स्टाफ सदस्यों के साथ प्रत्यक्ष रूप से चर्चा की गई । हिंदी टेबल कार्यशाला में अनुभागों द्वारा भरी जाने वाली तिमाही प्रगति रिपोर्ट में दिए गए आंकड़ों के आधार पर धारा 3(3) के अनुपालन एवं पत्राचार की स्थिति की समीक्षा की गई ।

टेबल कार्यशाला में कंप्यूटर पर हिंदी में कार्य को बढ़ाने के लिए वॉइस टाइपिंग से संबंधित कठिनाइयों का समाधान किया गया । इसके लिए राजभाषा विभाग, गृह मंत्रालय की वेबसाइट पर उपलब्ध हिंदी ई-टूल्स के अंतर्गत दी गई सुविधाओं से अवगत कराया गया । इसमें उपलब्ध गूगल वॉइस टाइपिंग, मशीन अनुवाद और ई-महाशब्दकोश शब्दावली के प्रयोग के द्वारा सभी स्टाफ सदस्यों को सरलतापूर्वक अधिक से अधिक कार्य हिंदी में करने की विधि प्रदर्शित की गई । इसके अतिरिक्त, राजभाषा विभाग, गृह मंत्रालय के वार्षिक कार्यक्रम 2017-18 में निर्धारित लक्ष्यों तथा संसदीय राजभाषा समिति की दूसरी उपसमिति को दिए गए आश्वासनों को पूरा करने की दृष्टि से अनुभागों के कार्मिकों से अपेक्षित दायित्वों के संबंध में उन्हें विस्तारपूर्वक बताया गया ।

टेबल कार्यशाला में अनुभागों को संघ सरकार की राजभाषा नीति, विभिन्न राजभाषा नियमों, अधिनियमों और आदेशों के अनुसार अपेक्षित अनुपालन, रिकार्ड का रखरखाव एवं अन्य सावधानियों से संबंधित सुझाव भी दिए गए । इसके लिए, सभी संबंधितों से अनुरोध किया गया कि नियमित/बारंबार प्रयोग आने वाले मानक प्रारूपों को हिंदी में ही लिखें जिसके अनुवाद के लिए राजभाषा अनुभाग की सहायता ली जा सकती है । कार्यशाला में अधिकारियों एवं कर्मचारियों को अपना मूल काम हिंदी में करने के लिए प्रोत्साहित किया गया । टेबल कार्यशाला के दौरान इस बात पर विशेष रूप से बल दिया गया कि सीएसआईआर मुख्यालय से प्राप्त पत्रों एवं राजभाषा विभाग, गृह मंत्रालय के दिशानिर्देशों के अनुसार प्रशासनिक कार्यों में हिंदी का प्रयोग शत-प्रतिशत अपेक्षित है।

EVENTS

CSIR-CRRI Foundation Day Celebrations

CSIR-CRRI Foundation Day was celebrated on July 14, 2017. On this occasion, Prof. Seyed Mohammad Reza Khalili, research counselor, Embassy of I.R. Iran to India, New Delhi was the Chief Guest. Prof. Seyed Mohammad Reza Khalili addressed the scientists through his Foundation

Day lecture and stressed for innovative research to fulfill the needs of the society. Various sports activities were conducted by CRRI recreation club on the occasion of foundation day. CRRI staff members participated enthusiastically. A cultural program was organised by "Samanvay Club" on the occasion of CRRI foundation day. Staff members and their wards performed in this cultural program.

Independence Day

On the occasion of 70th Independence day, Prof. Satish Chandra , Director, CSIR-CRRI hoisted the National Flag on August 15, 2017. The function was attended by the staff members and also their family members. Devotional and patriotic songs were recited on this occasion by the CRRI staff and wards of CRRI staff members.

CSIR Foundation Day Celebrations

CSIR Foundation Day was celebrated on September 27, 2017. On this occasion, Dr. Ram Boojh Yadav, Programme Specialist Environment & Natural Heritage, UNESCO, New Delhi was the Chief Guest. The function was attended by the Scientists, employees and ex-colleagues of CSIR-CRRI. Prof. Satish Chandra, Director, CSIR-CRRI addressed the gathering and highlighted the progress and journey made by CSIR-CRRI over the years. Various prizes were given away by Dr. Ram Boojh Yadav to the winners of various competitions organized by CSIR-CRRI for the children of CSIR-CRRI's employees. CSIR-CRRI employees who had completed 25 years of service in CSIR and all those who had retired during September 2016 to August 2017 were also honoured and mementoes were presented to them by the Director.

WORKSHOP

World of Concrete 2017

Workshop and Exhibition on Concrete and Structures-2017 held at Pragati Maidan on 10th August 2017 wherein suppliers from the commercial concrete and construction industry in India. had visited and showcased their products and technologies. The exhibition served as an excellent platform for industry suppliers to showcase innovative products, state-of the-art technologies, latest tools and equipment used in the industry.

VISITORS

- Prof. Mohammad Reza Khalili, Scientific & Research Counsellor, Embassy of the Islamic Republic of Iran visited BES Division of CSIR-CRR on 3rd July 2017.

- Mr. Holger Dietrich, Development Engineer, HILTI Entwicklungsgesell schaft, Munich (Germany), Ms. Kamalika Paul, Manager, Codes, HILTI, India, Pvt. Ltd. and Mr. Prabhat Sathe, HILTI, India, Pvt. Ltd., visited CSIR – CRRI, New Delhi on 01st Sep 2017.

HONOURS & AWARDS

- Prof Satish Chandra, Director CSIR-CRRI received excellence in academics award-2017 on Engineer's day Sep. 15, 2017. The award is conferred by the Institution of Engineering (i), Roorkee Local Chapter.

- Best Hindi Scientific Work Awards 2017 under Director Promotion Award Scheme to Dr. Ravindra Kumar and Dr. Mukti Advani.

- The Cold Mix technology developed by CSIR-CRRI was chosen for the CSIR Technology Awards 2017 under the category "Physical and Engineering Sciences". The award was given on September 26th, 2017 at Vigyan Bhavan, New Delhi by the Honourable President of India Shri Ram Nath Kovind ji.

- Dr. Rajeev Goel received Outstanding Concrete Technologist of Westeren UP Award for the Year 2017.

Endowment Fund

Mrs. Roychoudhary donated an amount of Rs. 6.00 lacs to CSIR-CRRI in the memory of her husband, late Dr. P. Roy choudhary, Founder Head, BES Division to establish the Endowment Fund to start a Lecture Series on Annual Basis at CRRI.

LECTURE DELIVERED

- Professor Satish Chandra, Director, CSIR- CRRI delivered key note address on "Mainstreaming of new Technologies for Road Construction" in 3rd International Conference on Roadtech – Sustainable Roads and Highways, New Delhi on August 29,2017.

- Sh. M. N. Nagabhushana addressed the delegates in National Roads and Highways Summit 2017 on 6th July 2017. Organised by PHD House, New Delhi.

- Dr. Mukti Advani delivered a lecture on NMT planning and design guidelines, for certificate course for Road Safety Engineers and Auditors at Indian Academy of Highway Engineers, Noida.
- Dr. Ravindra Kumar delivered a lecture on GIS application and Road Planning-Smart Transportation in Smart City, Hindustan College of Science & Technology at Madhav Institute of Technology, Gwalior.

NEW FACILITIES ADDED

- Crèche and Day care centre "Anchal" was inaugurated by Mrs. Sunita Chandra on 14th July 2017 at CSIR-CRRI. This crèche would facilitate the wards of CRRI staff to stay in CRRI crèche during working hours.

TRAINING PROGRAMS

Training Programme on "Construction and Maintenance of Village Roads under PMGSY" for the Engineers of RED, UP (July 03-06, 2017)

Training Programme on "Bridge Diagnostics, Performance, Evaluation and Rehabilitation" (July 10 - 14, 2017)

Training Programme on "Contract Management and Quality Control Aspects" for the Engineers of Rural Engineering Department, Uttar Pradesh (July 17-21, 2017)

Training Programme on "Design, Construction and Maintenance of Flexible Pavement" (August 21 - 25, 2017)

Training Programme on "Road Safety Audit" for the PWD Engineers of Raipur at Raipur, Chhattisgarh (August 30-31, 2017)

Training Programme on "Geotechnical and Landslide Investigations for Highway Projects" (Sept. 04 - 08, 2017)

One day workshop on cold mix technology under Green Road Mission is organized by CRRI and BITCHEM at Jammu for J&k rural road development authority and PWD J&K (21 Sept. 2017).

Training Programme on "International Course on Dissemination of HDM-4" (Sep. 11-22, 2017)

RETIREMENTS

Following staff members retired from service of the Institute during the period.

Shri T.K. Amla, Chief Scientist, on 31-07-2017

Shri Ram Lal, Lab. Astt. On 31-07-2017

Shri Bijender Kumar, Lab.Asstt on 31-07-2017

Mrs. Prema Prasad, Sr. Technician (2) on 31-08-2017

Brij Mohan Singh Negi, Chowkidar on 31-08-2017

Shri Sushil Kumar, Technical Officer on 30-09-2017

Shri Ram Pal, Pr. Tech. Officer on 30-09-2017

CRRI IN NEWS

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