



SRM

INSTITUTE OF SCIENCE & TECHNOLOGY
(Deemed to be University u/s 3 of UGC Act, 1956)

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HARNESS

The Nature to the Benefit of Life on Earth



SRM INSTITUTE OF SCIENCE AND TECHNOLOGY

SRM Nagar, Kattankulathur - 603 203, Chengalpattu District, Tamil Nadu.

ABOUT THE DEPARTMENT

The Department of Civil Engineering is one of the oldest and well-established departments in SRM. The undergraduate program in Civil Engineering includes civil engineering subjects and also offers value education, foreign languages, industrial training, personality development courses, yoga, instrumentation, computers, management, economics etc., as part of the curriculum, which are essential requirements for any successful Civil Engineer. Students gain practical experience from field visits to industries, dams and irrigation structures, construction sites, etc. The department's range of postgraduate programs includes core courses as well as electives and independent study. Postgraduate programs are offered in Structural Engineering, Construction Engineering and Management, RS&GIS, Environmental Engineering, and Geotechnical Engineering. Students gain training in their field of study through summer internships. doctoral research areas that are being pursued include concrete technology, structural systems, concrete bridges, soil-structure interaction, modern construction materials, environmental studies and wetland management. Well qualified and experienced faculty members form the department. They specialized in structural, geotechnical, environmental, water resources, transportation, construction engineering and management, remote sensing and GIS. The faculty members contribute to academic development by publishing books and presenting papers in international and national conferences. The labs are well equipped with state of the art equipment. B.Tech Civil Engineering programme at Kattankulathur Campus is accredited by Engineering Accreditation Commission (EAC) of ABET. (www.abet.org).

MESSAGE FROM HEAD OF THE DEPARTMENT



Dr. K. S. SATYANARAYANAN

Professor and Head / Civil / SRMIST

Dear Colleagues, I feel pleasure in publishing the first issue of the department newsletter “HARNESS” for the academic year 2020 – 21. Despite the uncertainty in the new academic year, our department offered best learning experience to students and faculty through brain storming online technical sessions and online faculty development programs. It is great to find enhanced research productivity through collaboration projects with other universities and our department jointly with UNIMAS organized 13th International Unimas Engineering Conference for the year 2020 at Sarawak. It is essential to enrich the students and faculty with advanced concepts in the field of Civil Engineering and in this context, Short Term Training Program with 13 speakers was conducted for the benefit of Practicing Engineers, Faculties and Students. Our department also aimed at providing effective knowledge to students through virtual workshop and technical webinars covering all aspects of Civil Engineering. Also, students were given opportunities to interact with industrial experts to understand the real time problems through virtual sessions. I thank all the faculty members and students for their support in organizing and conducting departmental activities despite the new challenges faced by them. I am extremely thankful for the members of DTP section in extending their support for making this newsletter successfully. I congratulate and thank all the team members of Student Chapter from various society of Civil Engineers Association in bringing this newsletter eventful.

ADVISORY COMMITTEE MEMBERS

ADVISOR

Dr. K.S. Satyanarayanan, Professor and Head

COMMITTEE MEMBERS (FACULTY)

Dr. P. R. Kannan Rajkumar, Associate Professor

Ms. C.Sudha, Assistant Professor

Ms. T.M. Jeyashree, Assistant Professor

Mr. N. Ganapathy Ramasamy, Assistant Professor

COMMITTEE MEMBERS (STUDENTS)

Siddhartha Sarkar

Suraj Swaroop

Faizan Ahmad Wani

Anjani Sonali Soreng

Anurag Bhatheshwar

Shivani M

Muruganantham S

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DOCTORATE AWARDED

| S.No | Name of the Candidate | Guide | Date of Viva | Topic |
|------|--------------------------|--------------------------|--------------|---|
| 1 | S. Sindhu Nachiar | Dr. K. S. Satyanarayanan | 3/7/2020 | Feasibility Studies on Development of Efficient Structural Systems Through Biomimics |
| 2 | B.M.Ramalinga Reddy | Dr. K. S. Satyanarayanan | 15/07/2020 | Feasibility Studies on Use of Gold Mine Tailing as Partial Replacement of Natural Sand in Sustainable Mortar and Concrete |
| 3 | Sanjenbam Nirmala Khuman | Dr. Paromita Chakraborty | 14/08/2020 | Fate of Pesticidal Persistent Organic Pollutants in the Lower Stretch of River Ganga and Sunderban Wetland in India |
| 4 | Snehasish Ghosh | Dr. R. Sivakumar | 24/08/2020 | Significance of Active Tectonics and Seismic Energy Anomaly for Earthquake Hazard - Study in Lower Tista Sub-Basin, India – An Integrated Geoinformatics Approach |
| 5 | Prakash Chandar. S | Dr. K. Gunasekaran | 17/09/2020 | Investigation on the Effect of Quarry Dust in Coconut Shell Concrete |
| 6 | A Veerappan | Dr. M. Lakshmipathy | 29/09/2020 | Application of Alternate Materials and Advanced Technologies in the Construction of Irrigation Structures – Case Studies |
| 7 | P.Jagannathan | Dr. K. S. Satyanarayanan | 10/10/2020 | Formulation and Studies on the Properties of Bacterial Concrete |
| 8 | V. R. Prasath Kumar | Dr. K. Gunasekaran | 15/12/2020 | Effect of Admixtures on Mechanical and Durability Properties of Coconut Shell Concrete |
| 9 | Sancho Rajan | Dr. Paromita Chakraborty | 18/12/2020 | Bioremediation of Selected Polycyclic Aromatic Hydrocarbon for Contaminated Soil and Sediment in Chennai City: A Semi Microcosm Study |

COLLABORATION WITH OTHER UNIVERSITIES

COLLABORATION - I

Transportation Engineering Division Faculties and Scholars of Department of Civil Engineering SRMIST is in active collaboration with IITM, NIT Warangal, Anna University, PSG Tech, Coimbatore and MAR Baselios college of engineering and Technology, Trivandrum in execution of funded projects, paper publications, MOOC course and research guidance

Funded Project Details:

Title: A Multiscale Approach for Characterization of Fatigue of Bituminous Materials

Funding agency and Scheme: Science and Engineering Research Board, DST, New Delhi/ EXTRA MURAL RESEARCH FUNDING

Principal Investigator – Dr. J. Murali Krishnan, IITM

Co Investigator – Dr. A. Padma Rekha, SRMIST

Cost - Rs 2337500 (Rs 9,07,500 for SRM and 14,30,000 for IITM)

MOOC Course Details:

Mechanical characterization of bituminous materials – 12 weeks – to be offered from Jan to April 2020 and Jan to April 2021 –

Prof. J. Murali Krishnan,

Dr. A. Padma Rekha, Dr. Neethu Roy and Dr. M R Nivitha

Ph.D. Guidance:

- Co-guiding Ph.D research and Doctoral committee member for research scholars at IITM

Selected Publications in collaboration:

- A Padmarekha, P.S. Divya and J. Murali Krishnan, 2019, Discussion of Linear and Nonlinear Rheological Properties of Bituminous Mastics Under Large Amplitude Oscillatory Shear Testing by Aboelkasim Diab and Zhanping You, Journal of Materials in Civil Engineering, ASCE Publication, [https://doi.org/10.1061/\(ASCE\)MT.1943-5533.0002656](https://doi.org/10.1061/(ASCE)MT.1943-5533.0002656), Impact factor: 1.984 (As on 8.8.2019)
- Pugazhenth A., Nagamani K., Padmarekha A. and J Murali Krishnan, 2019 Influence of Strain Amplitude and Rest Period on Fatigue Life of CRMB Modified Bituminous Mixture, Transp. in Dev. Econ. 5: 4. <https://doi.org/10.1007/s40890-019-0072-x>
- K. L. Roja, A Padmarekha, J. Murali Krishnan, 2018, Rheological investigations on warm mix asphalt binders at high and intermediate temperature ranges, Journal of Materials in Civil Engineering, ASCE Publication, [https://doi.org/10.1061/\(ASCE\)MT.1943-5533.0002027](https://doi.org/10.1061/(ASCE)MT.1943-5533.0002027), Impact factor: 1.984, Number of citations: 3 (As on 8.8.2019)
- K. L. Roja, A. Padmarekha, J. M Krishnan, 2017, Influence of warm mix additive and loading rate on rutting of warm mix asphalt pavement, International Journal of Pavement Engineering, 1-17, <https://doi.org/10.1080/10298436.2017.1293269> Impact factor: 2.298 (As on 8.8.2019)
- Varma, Remya K., A. Padmarekha, Parag Ravindran, H. U. Bahia, and J. M. Krishnan. Evolution of energy dissipation during four-point bending of bituminous mixtures, Road Materials and Pavement Design 18, no. sup2 (2017): 252-263, <https://doi.org/10.1080/14680629.2017.1304252>, Impact factor: 1.980 (As on 8.8.2019)

COLLABORATION - II

Collaborative project

Title of project:

Active Seismotectonic studies and its impact on the tribal society of Andaman region – A multi-disciplinary approach

Investigators:

Dr. Shin-Chan Han (International PI), School of Engineering, University of Newcastle, Australia

Dr. In-Young Yeo (International Co-PI), School of Engineering, University of Newcastle, Australia

Dr. R. Sivakumar (Indian PI), Earthquake Research Cell and Civil Engineering, SRMIST, India

Dr. S. S. Sridhar (Indian Co-PI), Department of Computer Science and Engineering, SRMIST, India

Status: Submitted to SPARC project 2019, Result yet to get

Collaborative Research Paper

P. Murugan, R. Sivakumar, Savithri Bhat (2020) An Empirical Algorithm using Derivative Difference for Estimating Chlorophyll-A in Case-II Water, International Journal of Advanced Remote Sensing and GIS, Volume 9, Issue 1, pp. 3170-3184

A. Arun Kumar, R. Sivakumar, Y. Sai Rutwik Reddy, M.V. Bhagya Raja, T. Nishanth, V. Revanth (2016) Preliminary study on marine debris pollution along Marina beach, Chennai, India, Regional Studies in Marine Science 5, 35–40

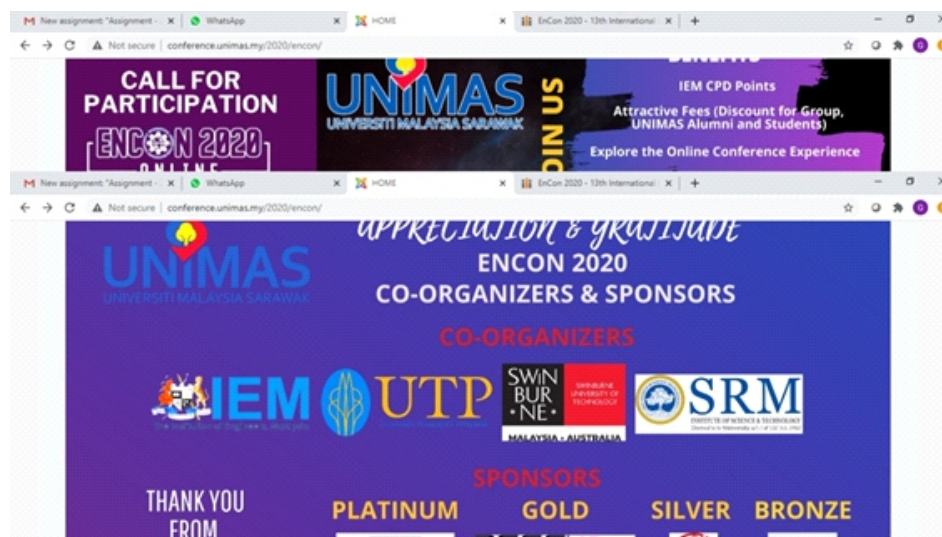
COLLABORATION - III

MoU between UNIMAS and SRMIST

A memorandum of understanding (MoU) signed between SRM Institute of Science and Technology (SRM IST), Kattankulathur and Universiti Malaysia Sarawak (UNIMAS), Malaysia in the month January 2020.

International Conference Organized:

On this MoU, UNIMAS & SRM IST jointly organized 13th International Unimas Engineering Conference (EnCon 2020) <http://www.conference.unimas.my/2020/encon/> on 27-28, October 2020 at Sarawak.



In this connection, SRM IST submitted 9 papers in this EnCon 2020 as a joint organizer in which one paper is put under joint collaboration between SRM IST & UNIMAS.

Paper Published Jointly with UNIMAS:

K. S. Anandh, K. Gunasekaran, and M. A. Mannan “Investigation on the factors affecting the lifestyle of professionals in the construction industries (Kerala and Tamil Nadu)”, International Journal of Integrated Engineering, Vol.12 (9), 2020, Page.246-252.

DST-SERB – RESEARCH TRAINING PROGRAM

The Department of Civil Engineering organized the DST-SERB (Science and Engineering Research Board) funded one-day Research Training Program at SRM Institute of Science and Technology on 20.11.2020 to provide professional training to the global researchers in the field of SAR data processing. The program was organized as a part of the ongoing funded research project "A Novel Approach to Model Soil Desertification Risk in Vellore District using Multispectral and Microwave Remote Sensing Techniques" under the Social Scientific Responsibility Scheme. The research training program was successfully conducted with over 60 participants worldwide, including professors, researchers, industrial personnel, and students. The day started with the welcome speech by the Head of the Department, Dr. K.S. Satyanarayanan, Ph.D., F.I.E., followed by the keynote address delivered by the Organizer Dr. P. Shoba (Principal Investigator). The morning session was started with the presentation on SAR data Processing, Modeling, and Validation Techniques, followed by the Hands-on Training on SAR Polarimetry Data Processing and Modeling in the afternoon session. The overall research training program was rated excellent by nearly 80% of the participants. The event's success was mainly due to the participants' active involvement and interactions.

SHORT TERM TRAINING PROGRAM (STTP)

ADVANCED CONCEPTS IN MATERIALS AND STRUCTURAL ENGINEERING

Department of Civil Engineering, SRM Institute of Science and Technology, Kattankulathur, in association with Universiti Malaysia Sarawak (UNIMAS), Malaysia, in support with UltraTech Cement Limited, Indian Concrete Institute (ICI) & Association of Consulting Civil Engineers (Chennai Centre) is conducting Short Term Training Program on "Advanced Concepts in Materials and Structural Engineering" during 16 - 21, November 2020 for the benefit of Practicing Engineers, Faculties and Students. This is a six days STTP which consists of two sessions per days. A total of 13 speakers from various organizations and institutions like Indian Institute of Technology (Madras), National Institute of Technology (Trichy), SRM Institute of Science and Technology, Kattankulathur, Universiti Malaysia Sarawak (UNIMAS), Sarawak, Malaysia, Larsen & Toubro Limited, UltraTech Cement Limited and M/s Vector Corrosion Technologies (Canada) presented the sessions.

SESSIONS:-

- **"IMPORTANCE OF CONCRETE MIX DESIGN FOR PRACTICING ENGINEERS"** by Er. L.S Kannan, Joint General Manager, Head Concrete Management Department, L&T Construction B&F IC
- **"PRECAST LARGE CONCRETE PANEL SYSTEM FOR MASS HOUSING PROJECTS IN INDIA"** by Er. AMIT BARDE, Head – Precast Initiative, Larsen & Toubro Limited, Technical Services, Buildings and Factories IC.
- **"CONSTRUCTION ON SOFT SOILS USING FOAM CONCRETE AND STABILIZED SOIL"** by Dr. Mohammad Ibrahim Safawi Bin Mohammad Zain, Associate Professor, Head of the Department, Department of Civil Engineering, Faculty of Engineering, Universiti Malaysia Sarawak (UNIMAS), Sarawak, Malaysia.
- **"UNCERTAINTIES IN ANALYSIS AND DESIGN IN CIVIL ENGINEERING"** by Prof. G. Augustine Maniraj Pandian, Professor, Department of Civil Engineering, SRMIST, Kattankulathur
- **"RECENT DEVELOPMENT IN CONCRETE TECHNOLOGY"** by Professor Dr. NG Chee Khoo, Department of Civil Engineering, Faculty of Engineering, Universiti Malaysia Sarawak (UNIMAS), Sarawak, Malaysia
- **"RIGID PAVEMENTS - ROADS IN DEVELOPING ECONOMY" VIABLE, SUSTAINABLE AND DURABLE ROADS** by Nagesh Puttaswamy, Zonal Head WT & RMDT (South), UltraTech Cement Ltd
- **"CORROSION MITIGATION USING SACRIFICIAL ANODES SYSTEM FOR REINFORCED CONCRETE STRUCTURES & CASE STUDIES"** by Er. Dhruvesh Shah, Head-India Business, M/s Vector Corrosion Technologies (Canada) in India.
- **"CHARACTERIZATION OF MODIFIED CEMENTITIOUS MATERIALS"** by Dr. L. Krishnaraj, Assistant Professor, Department of Civil Engineering, SRMIST, Kattankulathur.

- **“RECENT DEVELOPMENTS IN STEEL-CONCRETE COMPOSITE SYSTEM”** by Dr.R.Senthil Kumar, Assistant Professor & Associate Dean (P & D), Department of Civil Engineering, NIT Trichy
- **“BASE ISOLATION – AN INNOVATIVE SEISMIC PROTECTION TECHNOLOGY & ITS IMPLEMENTATION IN BUILDINGS”** by Er. Amutha Rangaraju, Senior Engineering Manager (Civil), L&T Construction, Buildings & Factories IC – EDRC
- **“ENHANCING SUSTAINABILITY AND DURABILITY USING CALCIUM SULFOALUMINATE BELITE CEMENT”** by Dr.PiyushChaunsali, Assistant Professor, Department of Civil Engineering, IIT Madras

STEEL-CONCRETE COMPOSITE STRUCTURES

The Department of civil engineering had conducted a six days short term training program on STEEL-CONCRETE COMPOSITE STRUCTURES from November 25-30th 2019. The details of the organising committee of the program are as follows Dr. K.S.Satyanarayan, Professor and Head of the Department, the convener of the program. Dr. N.Umamaheshwari Professor and Co-Convener and Mr. R. Rajkumar, Assistant Professor and Mr. C. Arunkumar, Assistant Professor were the Co-ordinators of the STTP. The program was conducted in association with Association of Consulting Civil Engineers, ACCE, Chennai with major sponsorship from CSIR and leading Construction companies in Chennai. A total of fifty two candidates attended the program of which twenty two were from other institute apart from SRM and ten candidates from various industries were benefited from attending the program. The Resource persons for the programs were invited from premier academic, research, industry and Institutions which allowed the organisers to provide the participants a broad coverage to the subject. The details of the resource persons are as mentioned below

| | |
|--|---|
| Dr. Sivarama Sarma Baskara | L&T Construction. |
| Dr. S.Arul Jayachandran | Professor,IITM, Chennai |
| Dr. S.R.Satishkumar | Professor,IITM, Chennai |
| Dr. R.Senthil | Professor & Head, Anna University, Guindy. |
| Dr. Madappa V.R.Sivasubramanian | Professor, NIT Karikal |
| Dr. Jane Halena | Professor, Anna University, Guindy |
| Dr. K.Muthumani | Chief Scientist (Retired), SERC CSIR, Chennai |
| Dr. K.Saravanan | Eversendai |
| Dr. M.Arunkumar | Eversendai |

The STTP SCCS 2019 received a overwhelming response and excellent feedback from Faculty members, Students and Researchers of other Institutions.

VIRTUAL LABS

Virtual labs were introduced to the students of Civil Engineering during the COVID Lockdown. The Virtual Labs will remotely be triggering an experiment in an actual lab and providing the student the result of the experiment through the computer interface. This would entail carrying out the actual lab experiment remotely. All the laboratory courses such as Surveying Lab, Strength of Materials Lab, Geotechnical Lab, Hydraulics Lab, Structures Lab and Computer Aided Design Lab were introduced to the student mostly following the VLabs provided NIT Suratkhal.

ONE DAY VIRTUAL WORKSHOP FIBRE REINFORCED CONCRETE AND ITS APPLICATIONS

Department of Civil Engineering and Centre for Advanced Concrete Research (CACR), SRM Institute of Science and Technology, Kattankulathur, Indian Concrete Institute, RV Pile Foundation and in Association with UltraTech Cement Ltd conducted an “ONE DAY VIRTUAL WORKSHOP ON FIBRE REINFORCED CONCRETE AND ITS APPLICATIONS” on 4th October 2020.

A total of 73 students from many institutions participated in this workshop. The workshop had two sessions in which first session was presented by Er.K.Pandian, Cluster Incharge, VAC & QC, TN & KL Cluster, UltraTech RMC on the topic “High Performance Concrete – A Robust Solution to enhance Service Life of RCC” and second session was presented by Dr.P.R.Kannan Rajkumar, Associate Professor, Department of Civil Engineering, SRM IST, Kattankulathur. on the topic “Enhancement of Mechanical Properties of High Performance Concrete using Hybrid Fibres”. A lot of video lectures were presented by both the presentors.

**High Performance Concrete –
A robust solution to enhance
service life of RCC**



FACULTY DEVELOPMENT PROGRAMME

GEOSPATIAL TECHNIQUES IN COASTAL ENVIRONMENT

Abstract of Five Days Faculty Development Programme on “Geospatial Techniques in Coastal Environment” from 01.12.2020 to 05.12.2020

In the Month of December 2020, Civil Department has conducted Five Days Faculty Development Programme on “Geospatial Techniques in Coastal Environment” from 01.12.2020 to 05.12.2020. The program time have fixed 1 hour and 30 min both morning and evening.

In this program ten key note speakers invited to deliver their experiences both theory and practical related to remote sensing applications in ocean observations among nearly 90 participant from various region like Surathkal, Kerala, Karnataka, AP, Delhi and TN.

RESOURCE PERSONS

Dr. Tune Usha, NCCR

Dr. C. Stella, Alagappa University

Dr. Sanil Kumar, NIO, Goa

Dr. Pravakar Mishra, NCCR

Dr. S. K. Dash, NCCR

Dr. S. Neelamani, KISR, Kuwait

Dr. Uday Bhaskar T V S, INCOIS

INNOVATION IN CIVIL ENGINEERING AND CONCRETE TECHNOLOGY (ICECT)

The Indian Concrete Institute (ICI), SRM Institute of Science and Technology (Civil), UltraTech Cement Ltd “Innovation in Civil Engineering and Concrete Technology (ICECT)” . and The Institution of Engineers (I), Kattankulathur Local Centre Jointly organized a five days online Faculty Development Programme on from 13th July to 17th July 2020. The event enabled participants to learn about new techniques in Civil Engineering and share the required skills to make themselves effective facilitators. After the formal welcome of Guest and participants and introduction about the FDP on the first day 13.07.2020, Guest of speaker Dr. Manamohan Kalgai, Advisor, UltraTech Cement Ltd, Delivered a lecture on “Durability and Sustainability of Concrete Structures” covering the aspects, importance and significance of durability of concrete and also about the need for sustainability. On the second day 14.07.2020, Guest of speaker Er. Joseph, Regional Head, UltraTech Cement Ltd, Delivered a lecture on “Concrete Mix Proportioning as per IS 10262: 2019”, he covered about the principle of mix proportion, nominal and design mixes, variables affecting the mix design and amendment made in IS 10262: 2019 compared to earlier version. On 15.07.2020, Guest of speaker, Er. Devender Pandey, Head Technical, RMC, UltraTech Cement Ltd, discussed about the need for ready mixed concrete, challenges in the manufacture of RMC, Materials used in RMC and also the major projects used RMC. On 16.07.2020, Guest of speaker, Dr. V. Ramachandra, Head Technical, UltraTech Cement Ltd, talked about “Concrete – A versatile option for Urban Roads” with the practical examples, how the concrete is a versatile option especially for urban roads. On the last day 17.07.2020, Guest of speaker, Er. Nagesh Puttasamy, Zonal-Head, White Topping, UltraTech Cement Ltd, discussed on “Mass Housing – Construction Technology”, the necessity for mass housing, advantages in terms of time and cost, on-going project details in all over the country. This five days FDP came to an end successfully with the formal vote of thanks by the organizers.

RECENT TRENDS AND INNOVATIONS IN CONSTRUCTION TECHNOLOGIES (RTICT)

The Indian Concrete Institute (ICI), SRM Institute of Science and Technology (Civil), UltraTech Cement Ltd. and The Institution of Engineers (I), Kattankulathur Local Centre Jointly organized a five days online Faculty Development Programme on “**Recent Trends and Innovations in Construction Technologies (RTICT)**” from 10th August to 14th August 2020. The occasion empowered participants to acquire about new practices in Civil Engineering and share the necessary skills to make themselves active implementers. After the formal welcome of Guest and participants and introduction about the FDP on the first day 10.08.2020, Guest of speaker Er. Ganesh P. Chudhary, Vice President (West) –ICI & Director FMC, Delivered a lecture on “Performance based Concrete Flooring for Industrial and Warehouse Applications” he disseminated about the importance aspects concrete flooring, methods followed, materials used, advantages and durability requirements for industrial and warehouses. On the second day 11.08.2020, Guest of speaker Er. Saibaba Ankala, Chief Engineer, Indian Railways (Govt. of India), delivered a lecture on “Planning, Design and Construction of Metro Rail Projects”, he covered aspects of planning metro rail project, methods of design, the challenges faced in the execution in different projects at different places. On 12.08.2020, Guest of speaker, Er. Vinay Gupta, President -ICI, CEO Tendon Consultancy Pvt Ltd, recent trends in bridges in world scenario. On 13.08.2020, Guest of speaker, Er. Dinesh Kumar Bhandari, Managing Director, Concrete Curalations Pvt Ltd, talked about “2020-A Golden Year for Precast Concrete” he mentioned about the principle of precast, techniques adopted in fields, the impact of precast concrete in construction industry. On the last day 14.08.2020, Guest of speaker, Prof. Manusanthanam, IIT Madras, discussed on “3D printing of concrete – Opportunities and Challenges”, he demonstrated the method of 3D printing construction, challenges facing in this technique and also the opportunities for future generation. This five days FDP came to an end successfully with the formal vote of thanks by the organizers.

ONLINE WEBINARS CONDUCTED

ASSOCIATION WITH ACCE (CHENNAI CENTRE) AND INDIAN CONCRETE INSTITUTE AND ULTRATECH CEMENT

A Series of Online Webinars were conducted during Aug – Dec 2020 for the benefit of Practicing Engineers, Faculty Members and Students during the COVID 19 Lockdown. A total of 140 - 200 participants attended the online webinars which includes students, faculties from many institutions, structural consultants and practicing engineers from Tamilnadu, Karnataka, Odisha, West Bengal, Maharashtra etc., attended this session. The webinar was organised in Association with Association of Consulting Civil Engineers, Chennai Centre, Indian Concrete Institute and UltraTech Cement Pvt. Limited.

| Lecture Series | Name of the Presenter | Date | Topic |
|----------------|--|------------|---|
| 1. | Er. K. Pandian, Cluster Incharge, VAC & QC, TN & KL Cluster, UltraTech RMC | 23.08.2020 | Durability Enhancement Techniques for Reinforced Cement Concrete |
| 2. | Er. U.P. Vijay, Senior Engineering Manager (Civil), L&T Construction, Buildings & Factories IC-EDRC, Chennai | 13.09.2020 | Design and Construction of Post Tensioned Slab |
| 3. | Er. C. Kalyanasundaram, Superintending Engineer, Tamil Nadu Public Works Department Planning and Designs Circle (Buildings), Chennai | 11.10.2020 | Simplified Methods in Practice for Checking Structural Design with Case Studies |

STUDENT CHAPTER ACTIVITIES

On 2nd October 2020, 3000 palm seeds have been planted near Kavanur lake along with ASCE SRM Student Chapter. The President of Kavanur Village and people from Bharathidasan Pasumai Arakattalai and local Kavanur village people helped in planting the palm SEED.

