



# SRM

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

## Newsletter of Civil Engineering

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# HARNESS

The Nature to the Benefit of Life on Earth



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**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 are 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](http://www.abet.org)).

## MESSAGE FROM HEAD OF THE DEPARTMENT



**Dr. K. S. SATYANARAYANAN**

Professor and Head / Civil / SRMIST

It is a great pleasure in publishing the Departmental newsletter highlighting all the aspect of events and activities held during the even semester of the academic year 2018 – 19. This newsletter brings the view of various technical and non-technical events organized by the Civil Engineering department. Students were given opportunities in engaging themselves in extracurricular and social activities. The various events like Green Drive plantation and ASCE Student Chapter sports events are few examples. It is essential for the students to understand the challenges faced by the society and the opportunities for budding engineers in solving societal problems. The sharing of knowledge in this context is evidenced from guest lectures and webinars. Various workshops on modern tool usage are conducted for effective learning of existing tools and technologies. The information on real work environment and an effort to bridge the gap of practical exposure can be done through industrial visits and students were given opportunities to visit dam site, water treatment plant and sewage treatment plant. Over the upcoming years, the number of guest lectures and technical events will be increased to bridge the gap of student's exposure to the modern construction world. I thank all the faculty members and students for making this semester eventful in various aspects. I congratulate the team members in bringing this newsletter successfully.

## 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**

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## FUNDED PROJECTS OBTAINED

Name of the Principal Investigator	Name of the Co-Investigator (if any)	Total Project Cost (in lakhs)	Funding Agency	Period	Status of the Project (Ongoing/Completed)
<b>Dr. R. Sathyanathan</b>	<b>Dr. P. Rajendran</b>	Rs. 12.254	DST-NSTMIS	2019-2021	Ongoing
<b>Dr. P. Shoba</b>	-	Rs. 21.16	DST-SERB	2019-2022	Ongoing

## Ph.D. AWARDED

S.No	Name of the Candidate	Guide	Date of Viva	Topic
1	<b>Dr. S. Durgadevagi</b>	<b>Dr. R. Annadurai</b>	11.3.2019	GIS Approach for Groundwater Quality Studies and Bioremediation for Removal of Heavy Metals in and Around Sipcot Erode District Tamil Nadu India
2	<b>Dr. L. Krishnaraj</b>	<b>Dr. P.T. Ravichandran</b>	21.01.2019	Synthesis and Characterization Study on Ultrafine Fly Ash Performance in Cementitious Material System
3	<b>Dr. M. Balasubramanian</b>	<b>Dr. S. Senthil Selvan</b>	08.04.2019	Experimental Behaviour of Concrete Modified With Sisal Fiber
4	<b>Dr. Manthiramoorthy</b>	<b>Dr. R. Sivakumar</b>	24.01.2019	Performance Evaluation of Intensity Based Automatic Satellite Image Registration Techniques for Subpixel Accuracies

## PATENTS

S.No.	Year	Patent Number/ Copyright	Complete Specification Filed Date	Published Date	Inventors (Name of Faculty/Students)	Patents Title	Case Status (Filed/Published/Granted)
1	2019	201941012831	3/30/2019	02.10.2020	S. Pradeep , T. PoornimaRao. S. Saiteja, V. Srinath Reddy	A SAND CEMENTITIOUS COMPOSITION AND ITS USE FOR PREPARING A FERRO-CEMENT ARTICLE	Filed
2	2017	201741043827	6/12/2017	8/3/2019	David Amalraj Justus Reymond/ Vellampalli. Mohan Venkata SaiKrishna	A System For Electrochemical Mediated Desalination Of Seawater And A Method Thereof	Published
3	2017	201741043827	6/12/2017	8/3/2019	David Amalraj Justus Reymond/ Vellampalli. Mohan Venkata SaiKrishna	A System For Electrochemical Mediated Desalination Of Seawater And A Method Thereof	Published

## PUBLICATIONS

Name of Faculty Member	No. of Publications
Dr.K.S.SATYANARAYANAN	12
Dr.R.ANNADURAI	7
PROF.G.AUGUSTINE MANIRAJ PANDIAN	1
Dr.P.T.RAVICHANDRAN	38
Dr.K.GUNASEKARAN	15
Dr.N.UMA MAHESWARI	1
Dr.R.SATHYANATHAN	6
Dr. P.R. KANNAN RAJKUMAR	9
Dr.SACHIKANTA NANDA	2
Dr.K.PRASANNA	4
Mr.S.PRADEEP	3
Dr.R.SIVAKUMAR	8
Dr.L.KRISHNARAJ	4
Mr.K.S.ANANDH	4
Mr.V.R.PRASATH KUMAR	5
Mr.J.RAJPRASAD	2
Mrs.SIJA ARUN	2
Mr.V.SATYA RAMESH POTTI	1
Mr.H.THIAGU	2
Ms.S.SINDHU NACHIAR	4
Ms.C.SUDHA	2
Mr.S.A.VENGADESH SUBRAMANIAN	1
Mr.D.JUSTUS REYMOND	4
Mr.S.PRAKASH CHANDAR	9
Mr.P.JAGANNATHAN	3
Mr.G.SENTHIL KUMAR	4
Mr.AROKIA PRAKASH	2
Mr.S.MANIVEL	2
Dr.M.BALASUBRAMANIAN	3
Ms.S.SIVAKAMASUNDARI	3
Mr.MANIKANDA PRABHU @ SARAVANAN S	1
Ms.D.JAISHREE	1
Dr.S.ANANDH	4
Mr.A.MANIMARAN	2
Dr.V.THAMILARASU	4
Dr.APARNA S. BHASKAR	1



Mr. G.VIMALANANDAN	1
Mr.N.PARTHASARATHI	5
Dr.J.SATISHKUMAR	1
Mr. R.RAMASUBRAMANI	4
Mr.M.PRAKASH	7
Dr.DURGA DEVAGI	2
Mr.S.DHANASEKAR	3
Mr. C. ARUNKUMAR	2
Dr. S.SENTHIL SELVAN	5
Mr.GANAPATHY RAMASAMY.N	4
Ms.M.KAMALANANDHINI	3
Dr.Christopher Samuel	3
Ms.S.SRIVIDHYA	1
Mrs.T. SARANYA	1
Dr.A.PADMA REKHA	3
Ms.S.KARTHIGA	3
Mr.SHAIK NIYAZUDDIN GUNTAKAL	2
Dr..DIVYA KRISHNAN.K	4
Dr.M.BHUVANESHWARI	2
Ms.C.PAVITHRA	5
Mr.S.SYED ABDUL RAHMAN	1
Dr.R.NAGALAKSHMI	2
Mr.R.VINOTHKUMAR	1
Mr.L.SABARI GIRI VASAN	1
Mr.M.B.SRIDHAR	1
Dr.R.RAVI	4
Ms.P.KRITHIKA	1
Mr.G.PREMKUMAR	1
Mr. GOPINATH	1
Dr.DEEPTHA THATTAI	7
Dr. P. SHOBA	2
Dr. S. BHUVANESHWARI	2
Dr. ALAK KUMAR PATRA	1
Dr. KARUPPASAMY SUDALAIMUTHU	1
Dr. N. PANNIRSELVAM	10



## EVENTS (WORKSHOPS / INTERNATIONAL CONFERENCES ORGANISED)

1. SRM ASCE Student Chapter Social and Community activity team Pongal Celebration, was organised by volunteers of ASCE on 10th January 2019 at Structural Engineering Laboratory in Kattankulathur campus.



Students in Tug of war

2. An Industrial visit to Kerala, was organized by Department of Civil Engineering, Faculty of Engineering & Technology, SRM Institute of Science and Technology, Kattankulathur on 30.1.2019 to 3.2.2019. A team of 54 B.Tech Civil Engineering students accompanied with four faculty members of Civil Engineering Mr. M.Prakash, Mr.N.Parthasarathy, Ms C.Pavithra and Mr. Senthil Srinivasan during the Visit. Students were explored about the civil engineering aspect of Ayyapankoil hanging bridge construction and Idukki Dam with the help of dam site engineer. Finally, industrial visit came to an end with the visit to Anjuruli Tunnel.



3. A Green Drive plantation event was organized by the ASCE SRM Student Chapter, Department of Civil Engineering on 7th of February 2019. The event was aimed at increasing the number of palm trees near SRM IST Kattankulathur campus wherein 150 palm seeds were planted by the students and faculties. The event was headed by the chapter's faculty advisor Mr. S. Pradeep and the chief guests invited were Dr. K. S. Satyanarayanan, Professor and Head of Department, Civil Engineering, and Dr. V. Thirumurugan, Associate Director (Campus Life). A brief introduction on benefits and importance of Palm trees and the need for saving these palm trees which are slowly fading out from our environment was briefed to the students. The students from both B.Tech and M.Tech showed keen interest in participation. The ASCE SRM volunteers guided the students throughout the event.



4. ASCE SRM Student Chapter organized its first sports event on 10th February, 2019. A friendly football match was organized just for the students of Civil Engineering Department and a single match was played. The event was held in SRM IST Kattankulathur Sports Ground. There was an active involvement found among the undergraduate students.



5. A two days' workshop was organized by ASCE SRM Student Chapter on the Analysis and Design of prestressed concrete bridge using Midas Civil software. The workshop was held on the 1st and 2nd of March, 2019. The instructors were Anuj Asati, structural engineer at MIDAS R&D Center India Pvt., Ltd and Rishwa Parab, Techno-commercial engineer at MIDAS R&D Center India Pvt., Ltd. A brief introduction about MIDAS and the advancements was explained.



During the workshop the participants were trained on the modelling, load application, construction stage definition and analysis of a PSC Box Girder Bridge. The designing was followed by an interactive session. The hands on session was found to be very helpful for the participants. As a token of appreciation, a memento was presented to Mr. Anuj Asati by Dr. K.S.Satyanarayanan, Head of the Department of Civil Engineering.

6. A badminton event was organized by the ASCE SRM Student Chapter on 3rd of March 2019. The event was only for female participants from the Civil Engineering Department. The event was held in the Indoor Badminton Court within the Directorate of Sports premises, and the matches began at 8:00 A.M.





## INDUSTRIAL VISITS

1. An Industrial visit to Sewage Treatment Plant (120MLD), Koyambedu, owned and maintained by Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB) was organized by Department of Civil Engineering, Faculty of Engineering & Technology, SRM Institute of Science and Technology, Kattankulathur on 20.2.2019. A team of 7 M.Tech Environmental Engineering students and 15 B.Tech Civil Engineering students along two faculty members of Environmental Engineering specialization Mr. K.Prasanna and Mr. S. Dhanasekar visited the plant.



Industrial visit to Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB)

2. An Industrial visit to Water Treatment Plant (300MLD), Puzhal, owned and maintained by Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB) was organized by Department of Civil Engineering, Faculty of Engineering & Technology, SRM Institute of Science and Technology, Kattankulathur on 04.04.2019. A team of 7 M.Tech Environmental Engineering students and 10 B.Tech Civil Engineering students along with three faculty members of Environmental Engineering specialization Mr. K. Prasanna, Mr. D. Justus Reymond and Mr. S. Ramesh visited the plant.



The officials briefed about the process involved in the WTP with the introductory session for the students and followed by visit to each treatment unit. One of the chemist, Mr. Manikandan who was accompanied with the team and explained about each unit like Aeration, Flocculation, Clarification, Filtrations and Distribution. He also mentioned that, it is one among the biggest water treatment plant in Tamil Nadu which treats the water from Puzhallake and Poondi reservoir which has a treatment capacity of 300 MLD.

3. An Industrial visit to Tamilnadu Waste Management Limited, Gummidipoondi, Chennai was organized by Department of Civil Engineering, Faculty of Engineering & Technology, SRM Institute of Science and Technology, Kattankulathur on 04.04.2019. A team of 7 M.Tech Environmental Engineering students and 10 B.Tech Civil Engineering students along with three faculty members of Environmental Engineering specialization Mr. K. Prasanna, Mr. D. Justus Reymond and Mr. S. Ramesh visited the site. The officials briefed about the process involved in the waste management with the introductory session for the students and followed by visit to each process. One of the plant incharge, Mr. Bramaiyah who was accompanied with the team explained about each process like Landfill, Incineration and Treatment. He also mentioned that the hazardous wastes from different industries are managed in that site.



## GUEST LECTURES

1. Guest Lecture on “Composite Cements”, by Chief Guest Mr.B.Suresh, General Manager Technical services, Chettinad Cement, Corporation Pvt. Ltd, Chennai, was attended by PG Students.



2. Guest Lecture on “Post tensioning of Buildings” at 05.03.2019, 09.30 am at the venue of, CRC Seminar Hall, Guest lecture was delivered by Er.UP.Vijay, Senior Engineering Manager, L&T Construction, Chennai. M.Tech Students took participation.



Guest Lecture on “Post Tensioning of Buildings”

3. Guest Lecture on “Remote Sensing Application to Oceanography and Coastal Research - An Indian Insight” was delivered by Dr. Sisir Kumar Dash Scientist, National Centre for Coastal Research (NCCR), Ministry of Earth Sciences, Government of India, Chennai on 5th April, 2019 at CRC Seminar Hall was attended by M.Tech Students



Guest Lecture on “remote Sensing Application to Oceanography and Coastal Research - An Indian Insight”

4. Guest Lecture on “Failure, Repair and Rehabilitation of Structures - Case Studies” was delivered by Dr.A.R.Santhakumar Former Dean, Anna University, Former Emeritus Professor, IIT Madras and Structural Consultant, Chennai on 8th April, 2019 at CRC Seminar Hall was attended by M.Tech and B.Tech Students



Guest Lecture on “Failure, Repair and Rehabilitation of Structures - Case Studies”



## SKILL DEVELOPMENT PROGRAMME

One day skill development workshop on “Construction Materials and Management Techniques” was conducted by the Department of Civil Engineering on 16th March 2019. Dr. L. Krishnaraj, Assistant Professor, coordinator of the workshop, welcomes the dignitaries of the programme and various participants from the other institutions. The Introduction of the workshop was given by Dr.K.S.Satyanarayanan, Professor & Head, Department of Civil Engineering. He pointed out that the theme of the workshop was to provide and disseminate the innovation and technology advancement in the field of construction materials and management. The workshop focused on the theoretical and hands-on experience.



Fig. Participants along with Faculty

## VALEDICTORY FUNCTION OF SOCIETY OF CIVIL ENGINEERS

The valedictory function held on April 24th, 2019 marked the end of the academic year 2018-2019 for the SRM Society of Civil Engineers. The session was convened by the Head of Department, Dr. K.S. Satyanarayanan, and was privileged to have Mr. R. Vivekanandan, Director of Metecno India Pvt. LTD as our Chief Guest. Mr. R. Vivekanandan shared his experiences with the students and briefed them with the difficulties faced by an aspiring Civil Engineer. The session of valedictory program felicitated students for BEST OUTGOING STUDENT, award of excellence in- sports, academics, research, outstanding performance in GATE.

