



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



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).

MESSAGE FROM HEAD OF THE DEPARTMENT



Dr. K. S. SATYANARAYANAN

Professor and Head / Civil / SRMIST

I feel pleasure in publishing the first issue of the departmental newsletter "HARNESS" for the academic year 2019 – 20. As an honour of achievement, our department is awarded with outstanding Best student chapter - Indian Concrete Institute (Chennai Chapter) in Concrete Day Celebrations 2019. I congratulate the team members for their successful accomplishment and achievement. It is great to find a considerable amount of brain storming sessions on modern tools and technologies in Civil Engineering during the period of July to December, 2019. Workshop on seismic analysis of RCC structures, workshop on water distribution network using EPANET are few examples. Industrial visits and interaction with industry experts through alumni meet and guest lectures are organized to enhance the industry-academic activities. It was privilege for the department to organize the National Concrete Canoe Challenge during National Level Technical Fest, 4th of its kind in India where teams from all over country participated. Students were also encouraged to participate in Social Campaign such as collecting donation for Assam flood relief, Plantation drive, SRM lake cleaning programme, International coastal clean-up program at Kovalam. We will also extend our support in mentoring the students through lectures from industrial experts in the upcoming years. I thank all the faculty members and students for their wonderful support in organizing and conducting departmental activities. 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	Supervisor	Date of Viva Voce	Topic
1	N. Kamaraj	Dr. P.T. Ravichandran	9-8-2019	Soil Stabilization Using Microbial Technology
2	Divya Krishnan K	Dr. P.T. Ravichandran	18-10-2019	Soil Stabilization Using Phosphogypsum and Wood Ash
3	Idowu Hazeer Adebakin	Dr. K. Gunasekaran	27-12-2019	Self Compacting Lightweight Concrete using Coconut Shell Aggregate for Rural Application
4	B. Vijaya	Dr. S. Senthil Selvan	14-08-2019	Experimental Investigation of Medium Strength Concrete Containing Manufactured Sand
5	K. Prabhu	Dr. R. Sivakumar	19-07-2019	Assessment of Groundwater Resources And Management Plan for Nandiaru Sub Basin Through Integrated Geophysical Investigations and Geospatial Techniques
6	Sandeep Mahajan	Dr. R. Sivakumar	15-11-2019	Geospatial Based Integrated Water Resources Study and Management Plan At Habitation Level for Gad Basin Maharashtra

PATENTS

S.No.	Country	Year	Patent Number/ Copyright	Complete Specification Filed Date	Published Date	Inventors (Name of Faculty/Students)	Patents Title	Case Status (Filed/Published/Granted)
1	India	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

AWARDS

The award for outstanding Indian Concrete Institute (Chennai Chapter) Best student chapter was awarded to Society of Civil Engineers Association, Department of Civil Engineering, SRM Institute of Science and Technology, Kattankulathur on 17.09.2019 at Hotel Green Park, Vadapalani. The awards were received by Dr. K. Gunasekaran, Mr. Ganapathy Ramaswamy N, Ms. C. Pavithra and student secretaries.



EVENTS & WORKSHOPS ORGANIZED

TECHNO-SCIENCE PROJECT EXPO

A Techno-Science Project Expo was organized by ASCE SRM Student Chapter along with MTS India Section for school students from classes 6th to 12th on the 11th and 12th of July 2019. The event was participated by 420 students from 19 different schools in and around Tamil Nadu. The event was organized to provide a platform to school students to showcase their technical knowledge and innovative skills. There were competitions on poster presentation, model display and quiz. DAV Public school won the overall championship for the expo.



ALUMNI INTERACTION

An Alumni Talk was held on **13th July, 2019 on Naval Architecture**. The guest speaker was Lieutenant Sai Sabarish M. who graduated from SRM IST in the year 2017 as a Bachelor of Technology in Civil Engineering. Lt. Sai Sabarish is currently posted in INS India and is a Naval Architect Officer in the Indian Navy. . The session was held specially for the SRM Concrete Canoe Racing Team (CCRT) members. Lt. Sai Sabarish was the captain of the SRM CCRT team when they won the National Concrete Canoe Racing Championship held by IIT Madras in 2015, and so he provided the current SRM CCRT members with valuable information about designing of canoes.



An alumni talk was given by **Mr. Ashok Kumar ,Founder, CEO, Trashgaadi, on 26. August, 2019**. He gave a talk on the importance of awareness on Waste Management. He explained about waste management pyramid: Refuseseduce reuse, re-purpose, recycle. recovery He explained about the problems faced by them while segregating waste from residential buildings. He concluded his speech by saying the students to concentrate on the basics of their study, engage themselves in various extracurricular activities.



An alumni talk was given by **Mr. S. Gautham SS Infrastructure Development Consultants Limited, on 28th August 2019**. The Alumni shared his experience on design field and discussed a case study on live problem of a saondary beam funning across a primary beam. lie gave description and failures of structure regarding cracks. lie also discussed definition of crack, forces on crack, and era. on lintel beams. lie also discussed the shear failure in lintel beams and horizontal cracks that occur on wall due to improper alignment of wall and diagonal cracks on walls due to lateral forces especially seismic forces. He also discussed about the testing of concrete specimen. Certain information like split tensile strength tcst value should be l i86 to 1/106 of the value of flexural strength test value, significance denim] point loading and two point loading in flexural strength tat., bending occurrence in two point loading were also shared.



LECTURE ON “STUDY ON SHALLOW FUNICULAR CONCRETE SHELLS”

Mr. P. Sachithanantham is an alumnus of 1998 passed out of Structural Engineering, Department of Civil Engineering, SRM Engineering College, Affiliated to Madras University highlighted his speech on “FUNICULAR SHELLS”. In this lecture, he started with discussing the types of shells (1) shallow curved shells if it is less than $L/5$ (2) deep curved shells if it is greater than $L/5$ and also about the experimental approach of funicular shell plate along with a video demonstration in which he has stated the concrete funicular shells are cast in such a way that for every 1m, there is a double curvature with 80mm rise and the specimens of size 1080mm x 1080mm in plan with a rectangular edge beam of 50mm x 40mm are prepared using cement concrete of M20.



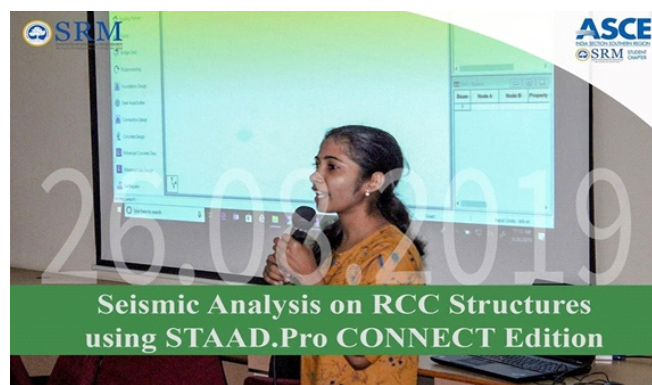
GUEST LECTURE ON “FERROCEMENT AND THEIR APPLICATIONS”

Dr. D. Shoba Rajkumar is an alumnus of 1989 passed out of BE Civil Engineering, SRM Engineering College, Affiliated to Madras University. She started her interaction with the students by sharing her memories in our college, about the faculty members, infrastructure and her experience. She discussed about the importance of concentration of the students in studies and co-curricular activities. The alumni explained her area of research on ferro-cement, and she has patented on a novel idea on ferro-cement. She also encouraged the students to visit the library regularly and to gain up to date knowledge by reading journals. Finally, she expressed her happiness in the interaction with the students of our University.

WORKSHOP

SEISMIC ANALYSIS OF RCC STRUCTURES

A one-day workshop on Seismic Analysis of RCC Structures using STAAD.Pro CONNECT Edition was organized by ASCE SRM Student Chapter on 26th August 2019. The speaker for the session was Ms. Aswathi A. who is an Application Engineer at Bentley Systems. The students were given a brief introduction about the workshop and the welcome address was given by Mr. S. Pradeep, Faculty Advisor, ASCE SRM student chapter and Dr. S. Senthil Selvan, Professor, on behalf of the Department of Civil Engineering. The participants which consisted of both B.Tech and M.Tech students were given a brief about the advancements in STAAD.Pro CONNECT Edition. The students were taught on how to model a multistorey building in both concrete and steel and material selection, assigning of support conditions and assigning of seismic loads were discussed.



WATER DISTRIBUTION NETWORK USING EPANET

A Workshop on water distribution was conducted by ASCE SRM Student Chapter on 27th August 2019 in Cadd Lab, CRC Block, Main Campus. The speaker of the day was Dr. Deeptha Thattai, Associate Professor, Department of Civil Engineering. The workshop was commenced by the introduction of the speaker. Dr. Deeptha Thattai took over and started introducing the software EPANET and its tools during the workshop by means of power point presentation. The aim of the workshop was to analyze, simulate and manage water distribution piping systems. It comes in handy for engineers and water utilities, providing them with a comprehensive tool for analyzing hydraulic systems and designing simple to complex piping networks.



STEEL CONCRETE COMPOSITE STRUCTURES

The short term training program on Steel-Concrete Composite structures is organized to impart knowledge and to realize the importance of Composite structural elements in future constructions. The advantages offered by Steel-Concrete Composite structures such as fast track methods, economy, lesser dead load, thinner sections and better seismic resistance are yet to be realized in Indian construction field.



FACULTY DEVELOPMENT PROGRAM GEO-SYNTHETICS AND SPECIAL CONCRETE

Five Day Faculty Development Program on "PRACTICAL TRAINING ON GEOSYNTHETICS AND SPECIAL CONCRETE" The fdp envisages the creation of a platform to develop the skills of the faculty members for the practical training in Geosynthetics and Concrete materials in the department of Civil Engineering, SRM IST. This allows introduction of new research in institutes and state of the art techniques adopted. This FDP provides hands on training on Soil strength characteristic, Geo synthetic properties and also provides training on Special concrete using M-sand and coconut shell aggregates. It involves participation of student in technical education programmes and academia research, with a view to gain the advantage of fertilized ideas for system improvement. It also helps the participants to get acquainted with material testing practices and their integration in technical knowledge and their implementation aspects. Faculty experts Dr.P.T.Ravichandran, Dr.K.Gunasekaran, Dr. P.R.Kannan Rajkumar, Ms. K.Divya Krishnan, Ms.Mary Rebecca Sharmila , Ms.C. Pavithra, Mr.S.Dhanasekar, Mr. S. Anandh, Mr.A.Manimaran and Ms.D.Jaishree explained the laboratory experiments on the materials like Geotextiles, M-Sand, light weight concrete with coconut shell SCC, high strength FRC etc.,



GUEST LECTURES LECTURE ON "FOAMED CONCRETE"

On 22nd August 2019 a lecture on "Introduction to Light Weight Concrete" was conducted by the ASCE SRM Student Chapter, Department of Civil Engineering at the Sir Vishveshwaraya Seminar Hall. A brief introduction on Light Weight Concrete followed by the classification, Quality parameters (such as thermal conductivity, fire resistance, workability and durability etc.) and advantages and disadvantages of Autoclaved aerated concrete (AAC) and Foamed concrete. He also showcased light weight concrete specimens of various densities, which helped the students for better understanding.



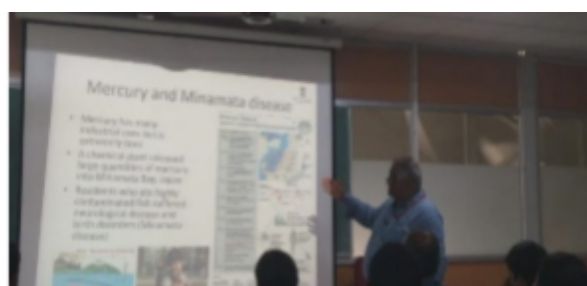
GUEST LECTURE TECHNICAL TALK - CHENNAI METRO RAIL

A technical talk on Chennai Metro Rail project was organized by ASCE SRM Student Chapter under Department of Civil Engineering on 28th August, 2019 at Sir Vishveshvaraya Hall, CRC Block, Main Campus wherein the Chief Guest Mr. J. Krishnamoorthy, Additional General Manager of Chennai Metro Rail Limited (CMRL) enthralled the students with in-depth details about the city's biggest infrastructure project. Mr. J. Krishnamoorthy gave a brief introduction to students about CMRL, along with its mission and vision. The metro rail network in Chennai consists of 32 metro stations, with 19 of them being underground and the rest being at elevated level. He illustrated the technical and social constraints of tunnelling in a city with heritage buildings nearby and displayed the Plans, cross sectional drawings of the underground stations and gave industrial exposure to the students at large.



INTRODUCTION TO COASTAL POLLUTION

Society of civil engineering organized guest lecture on 25th September 2019 (Timing 2.00 to 3.00PM) at Structural Testing Lab and this has co-ordinated by Dr. R. Nagalakshmi. The guest lecture topic on **“INTRODUCTION TO COASTAL POLLUTION”** delivered by Dr. Pravakar Mishra, Scientist – F from National centre for Coastal Research (NCCR), MoES, Government of India. The program started with Welcome address given by Dr. Purushothaman and then chief guest introduced by Dr. S. Senthil Selven and memento was given to Dr. Mishra to honour him. In this lecture more than 40 M. Tech students, 80 B. Tech and thirteen staffs from Civil Engineering department have been attended and gather the information about coastal pollution. During the lecture Dr. Mishra explaining about the solid waste management problem in India, and which come to contact ocean environment cause eutrophication (Algal Bloom) and he said due to this, entire ocean food system getting disturbed. Then he explained about NCCR activities to protect and conserve the marine environment through regular monitoring doing by remote sensing observation and water quality analysis.



ASCE CHAPTER ACTIVITIES

"Education is far more than the books" The process of true learning includes reflecting, solving and creating. To inspire the students to indulge more in practical learning ASCE SRM Student Chapter set up an exhibition of all the projects and events done by the Chapter. Students and faculties were explained about the models kept in the exhibition. It was a very informative event, especially for the second year B.Tech and First year M.Tech students. They became acquainted with the activities and events conducted by the Chapter. "The true sign of intelligence is imagination and Education is far more than the books". to inspire the students to indulge more in practical learning, an exhibition was organized on 8th August, 2019, where students and faculties were explained about the different innovative models, projects and events done by the chapter.



PROJECT-LOW DENSITY SOUND INSULATED CONCRETE FABRICATED WALL CLADDING TILES

In this study light weight concrete is used as Wall Cladding tiles in the building, as light weight concrete shows satisfactory sound insulation property. The light weight Wall cladding was fabricated by addition of Fiber glass powder and alccofine as a cement replacement and different sizes of Cenosphere such as Cenosphere 300 micron and Cenosphere 425 micron as a fine aggregate replacement. Various parameters of the light weight concrete Wall Cladding tile both physical and mechanical properties were investigated. The test was conducted to determine the compressive strength, and the sound insulation ability of the fabricated Wall Cladding tile. The experimental investigation shows that Wall Cladding fabricated as a light weight concrete has reliable compressive strength and satisfactory sound insulation property.



SURFING BOARD

The students of ASCE SRM conducted an analytical and experimental investigation Construction of cost effective lightweight concrete surfing board. The density of the concrete mix to design the surfboard is found to be 1040 kg/m^3 . The compressive strength of design mix was found out to be 12 N/mm^2 . The rocker affected the surfboard performances more than the tail. Flatter table bottoms induced a larger wetted area, which in return led to a higher drag but also higher lift. The Stability Analysis was carried out by Max-Surf.



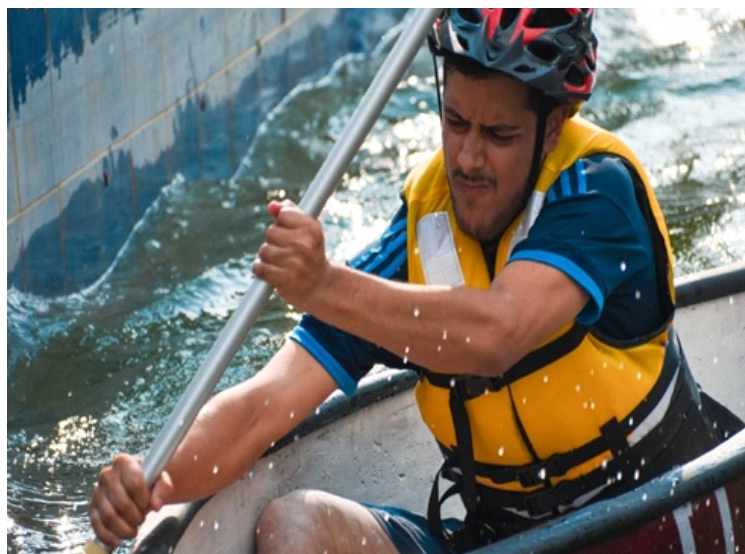
STUDENT SOLAR AMBASSADOR WORKSHOP

In remembrance of Mahatma Gandhi on his 150th birthday, IIT Bombay in association with Unnat Bharat Abgyan & SRM IST organized a Student Solar Ambassador Workshop on 02.10.2019 at Dr.T.P.Ganesan auditorium. Around 1000 school students, students of SRM IST came together on a large scale and learned to assemble their own solar study lamps. This momentous occasion was graced by Mr. A.Prabakhar, the District Education Officer, Chengalpattu & Dr. Sandeep Sancheti, Vice Chancellor of SRM IST. It was a Mega Global event, which saw the participants taking a pledge of nonviolence to the environment. This was part of the National level event.



NATIONAL CONCRETE CANOE CHALLENGE

The National Concrete Canoe Challenge for the year 2019 was conducted on 5th and 6th October in association with Aaruush'19, the National Level Techno-Management Fest of SRM IST. This event is only the 4th of its kind in India where teams from all over country came up with innovative solutions to design, fabricate and construct 2m canoes over a period of 4 months. The challenge not only tested the effectiveness of the canoes in a race, but also the efficiency of design and lightness of the concrete. The event was star studded with Dr. C.V.R. Murthy (Professor, Structural Engineering, IIT Madras), Mr.Rajayogan Palanisamy (President, ASCE India, Southern Region) & Dr. Basil Gnanappa (Secretary, ASCE India, Southern Region) gracing the occasion. Various teams all over Tamilnadu Participated with their canoe and exhibited their efficiency.



SPORTS ACTIVITIES

On behalf of the ASCE SRM Student chapter, a sports event was conducted for the entire SRM Institute of Science and Technology. The event was held from 11th to 13th October. Nearly 500 students took part in this event. The following are the details of the events conducted: Cricket – 7 teams, Mini Cricket - 5 teams, Football - 6 teams, Badminton-11 teams, Track events (100m, 200m, 400m), Chess, Carrom Board.



MINI PROJECT DISPLAY ON STRUCTURAL DYNAMICS

A mini project display was conducted by ASCE SRM Student Chapter on 16th October 2019. The first-year students of MTech Structural Engineering displayed their projects, which was based on the concepts of Structural Dynamics. The following were the projects displayed. TUNED MASS DAMPER, Horizontal Tuned Mass Damper (TMD), Vertical Tuned Mass Damper (TMD), SEISMIC BASE ISOLATION & BRACED FRAME STRUCTURES.



RESEARCH ARTICLE WRITING

In order to create awareness and educate the post graduate students about the manner and systemic approach to writing a journal or a research article, a program was conducted on 8 th November to address the students and research scholars. Dr. Bharathi Raja, Professor, EEE Department, SRM IST educated students, Research scholars and faculties in a 3 hour session on various do's and don'ts in writing research paper and gave insights on the thoughts and methods generally adopted by reviewers. It also included tips for creative content writing and systematic approach for writing a journal. The effective way for writing a journal proposal was discussed in detail. An interactive session was followed the discussion.



SKILL DEVELOPMENT PROGRAMME GEO REINFORCEMENT AND CONCRETE MATERIALS

One day Workshop on Geo-reinforcement and concrete materials SRM Institute of Science and Technology, Department of Civil Engineering, Kattankulathur conducted a workshop on “Geo-reinforcement and concrete material” on 28.09.2019 in association with SRMIST IGS Student Chapter and IEI, Kattankulathur, Local Chapter. The undergraduate student around 120 participants from various colleges were attended the workshop. Dr. K. Gunasekaran, Professor, Department of Civil Engineering welcomed the gathering and briefed about the purpose of this workshop. Dr. P. T. Ravichandran, Coordinator of this workshop and Professor / Civil delivered a lecture briefly about “Soil reinforcement” followed by a short introductory lecture on “Concrete made with Coconut Shell” by another coordinator of this workshop Dr. K. Gunasekaran. After inaugural session hands on experimental training on Geo reinforcement and concrete made with coconut shell were given to the participants in the laboratories by the Faculty members connected. The event went off well with the supports and sponsored by UltraTech cement Limited and CASNI Infra Pvt. Limited.

MATERIAL PROPERTIES TESTING ON GEOTECHNICAL AND CONCRETE TECHNOLOGY

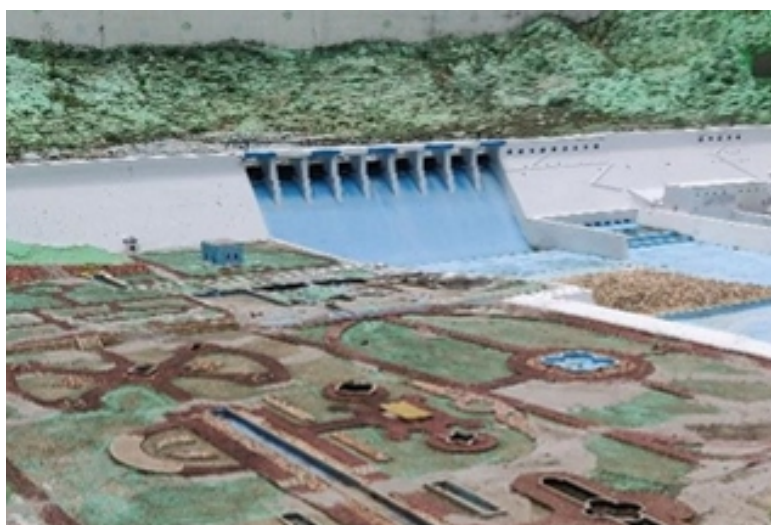
SRM Institute of Science and Technology, Department of Civil Engineering, Kattankulathur conducted a workshop on “Material properties testing on Geotechnical and concrete technology” on 28.09.2019 in association with SRMIST IGS Student Chapter and IEI, Kattankulathur, Local Chapter. The undergraduate student around 120 participants from various colleges were attended the workshop. Dr. K. Gunasekaran, Professor, Department of Civil Engineering welcomed the gathering and briefed about the purpose of this workshop. Dr. P. T. Ravichandran, Coordinator of this workshop delivered a lecture briefly about “Geo Materials” followed by a short introductory lecture on “Concrete made with Coconut Shell and fibers ” by another coordinator of this workshop Dr. K. Gunasekaran. After inaugural session hands on experimental training on Geo reinforcement and concrete made with coconut shell were given to the participants in the laboratories by the Faculty members connected. The event went off well with the supports and sponsored by UltraTech cement Limited and CASNI Infra Pvt. Limited.

EXPERIMENTAL TRAINING ON GEO-TEXTILES AND CONSTRUCTION MATERIALS”

SRM Institute of Science and Technology, Department of Civil Engineering, Kattankulathur conducted a workshop on “Experimental training on Geo-textiles and Construction materials” on 12.10.2019 in association with SRMIST IGS Student Chapter and IEI, Kattankulathur, Local Chapter. The undergraduate student around 120 participants from various colleges were attended the workshop. Dr. K. Gunasekaran, Professor, Department of Civil Engineering welcomed the gathering and briefed about the purpose of this workshop. Dr. P. T. Ravichandran, Coordinator of this workshop delivered a lecture briefly about “Geo Textiles” followed by a short introductory lecture on “construction materials” by another coordinator of this workshop Dr. K. Gunasekaran. After inaugural session hands on experimental training on Geo reinforcement and concrete made with coconut shell were given to the participants in the laboratories by the Faculty members connected. The event went off well with the supports and sponsored by UltraTech cement Limited and CASNI Infra Pvt. Limited.

INDUSTRIAL VISITS POONDI RESERVOIR

A One day industrial visit was planned for 1st year and 2nd year students of M. Tech in Environmental Engineering on 4 th September 2019. We got a chance to visit Sathiyamoorthi sagar reservoir or Poondi reservoir at Poondi, Thiruvallur District, TamilNadu, India. A total of 12 students accompanied by Dr. DeepthaThattai and Mr. D. Justus Reymond visited the Poondi Reservoir. It was constructed in 1944 across the Kosathalaiyar River Thiruvallur district with a capacity of 2573 Mcft. This reservoir or Kotralai river in was constructed at the cost of Rupees 65 lakhs. The students also visited the Institute of Hydraulics and Hydrology in the Poondi dam And also got chance to visit the model simulation dam, where we learnt about how the water is distributed according to the flow conditions The reservoir has a garden is a popular picnic spot in the region.



INDUSTRIAL VISIT - CSIR STRUCTURAL ENGINEERING RESEARCH CENTER

Industrial visits are the essential breaks necessary to keep us sane during engineering". A one-day Industrial Visit was organized by ASCE SRM Student Chapter, Department of Civil Engineering on 26th September 2019 to CSIR-Structural Engineering Research Center, Taramani, Chennai. It was conducted for M.Tech first year students and B.Tech Pre final and final year students. The students were guided by the members of the CSIR through the various facilities present there. They were briefed through the various multi-disciplinary research projects being carried on over there. A tour of Steel Laboratory, Fatigue and Fracture Laboratory, Wind Engineering Laboratory, and Advanced Seismic Testing and Research Laboratory was given to the visiting students. The Industrial Visit was very informative, and the students were encouraged by the faculty members to participate in similar multidisciplinary and development work.

FIELD TRIP- STEEL COMPOSITE CONSTRUCTION

On 7th November, the first year M. Tech Students of SRM IST visited a steel-composite construction site in Structural Testing Lab, SRM IST where they witnessed the extension of the laboratory floor. They observed the steel decking sheets and learned about shear connectors that are used to transfer the loads in the steel composite deckings. Composite construction exists when two different materials are bound together so strongly that they act together as a single unit from a structural point of view. The recent advancements in composite construction was discussed in detail followed by an interactive session.



INDUSTRIAL VISIT TO KERALA

An Industrial visit to Kerala, was organized by Department of Civil Engineering, on 06.09.2019 to 10.09.2019. A team of 72 B.Tech Civil Engineering students along with four faculty members of Structural Engineering and environmental engineering specialization Dr.Alak Kumar Patra, Ms.C.Sudha, Ms. C.Pavithra and Mr. VinuPrakash were the participants of this Industrial Visit. Day 1 the chief engineer of Siruvani water treatment plant explained the process of water treatment, the Muthikulam Falls, a perennial source of water with Noyyal to meet the drinking water requirements of the city. The remaining days students visited the IDUKKI reservoir in Kerala.



SOCIAL CAMPAIGN

ASSAM FLOOD RELIEF – DONATION

The ASCE SRM Student chapter under department of Civil Engineering in collaboration with Red drive trust collected flood relief materials for Assam from 28th to 30th July 2019. Various relief materials were collected from Boys' and Girls' hostels in SRM IST Kattankulathur campus which was then sent to Assam on 31st July 2019. Many materials such as Biscuits, clothes, sanitary napkins, medicines were collected. We thank everyone who took a step forward by contributing materials for the needy.



PLANTATION DRIVE

As contribution to One student One tree initiative launched by Hon'ble HRD Minister Dr. Ramesh Pokhriyal, the members of ASCE SRM Student Chapter conducted a plantation drive on 15th August. One of the sole reasons that our Earth is in danger today is destruction of the forest. To increase the green cover in SRM campus, students and faculty took part in plantation of saplings behind Dental Girls' hostel. It gave the students and faculty an opportunity to connect with the nature. This event was conducted with the idea of conservation of trees and caring for the Rights of the future generations.



PALM TREE SEED COLLECTION

The ASCE SRM Student Chapter organized a Palm Tree Seed Collection activity on 25th August 2019. This activity was organized to spread awareness about the importance of palm trees and its benefits, and to increase the number of palm trees. The activity was carried out at Olakkur, near Dindivanam and around 30 students volunteered to collect seeds from a lake bund. The ASCE SRM Student Chapter had also invited volunteers from Bharadhidasan Pasumai Arakkatallai, an NGO which has actively participation on environmental causes like lake cleaning, tree plantations, etc. Mr. Subasu Tamilian, a representative of the NGO, lectured the participants about the history of palm trees and about its products and uses and the benefits from palm trees. He briefed the students with the activities done by their NGO and instructed the students about how to collect the seeds and where to look for them. Senthamizh Mozhiarasan, an 8 years old boy who has been participating in the NGO's activities since he was 5 years old, spoke about the 34 different species of palm trees. The participating volunteers started collecting the palm tree seeds at 11:00 am at a small palm tree plantation around a lake bund in Oorakur. In a span of around 2 hours, the volunteers collected more than 670 palm tree fruits containing more than 2000 seeds which were then taken to the SRM Institute of Science and Technology, Kattankulathur Campus and were stored in the Structural Testing Lab. On the following day 26th August, 2019, the palm tree fruits were split open to remove the seeds and they were spread out to dry the seeds for three weeks so they can be later planted at a suitable spot. The Chapter plans to organize another event to plant the collected seeds so everyone might benefit from the palm trees in multiple ways.



MASSIVE PALM SEED PLANTATION

“THE DAY YOU PLANT THE SEED IS NOT THE DAY YOU EAT THE FRUIT”.

With this motto ASCE SRM Student chapter in association with Bharathidasan Pasumai arakattalai Assisted for World Record on 22nd September 2019. birthday, a number of NGO's joined hands to plant palm seeds on a larger scale and set up a ASSIST WORLD RECORD. The media team of 'Puthiya Thalaimurai' took to covering the plantation drive and boosted the morale of the volunteers and students alike. The palm seeds were then planted along a 4-km radius along the bunds of the lake. The event took momentum when the local people also pitched in along with the students. A very rare flower 'Senkandhal malar'- Tamilnadu's stateflower was spotted. The students were then enlightened about the uniqueness of the flower and its usage in the ancient ages.



SRM LAKE CLEANING PROGRAMME

A lake cleaning drive was organized on 8 th November, where a number of student volunteers and faculty members went on a mission to clean the banks of Potheri lake. The students also took the opportunity to spread awareness on plastic waste amongst the local and student. Questionnaires containing 10 questions were also distributed to the locals to learn about their habits in how they deal with plastic waste that they generate. Programme focuses on cleaning and greening existing lake and it is also considered as an initiative to prevent risk of water shortage. The team conducted several doorstep awareness campaigns in houses around the lake.

INTERNATIONAL COASTAL CLEANUP PROGRAM AT KOVALAM

India has about 7,500 km coastline, endowed with rich of biodiversity, ecology and economy. Every year thousand tons of waste reach into the coast and pollute the environment. It needs to conserve and protect the coastal environment, September 21, 2019 observed as International Coastal Cleanup day. The Swatchh Bharat Abhiyan of Government of India aspires for cleaner India; under this scheme, SRM Institute of Science and Technology, Katankulathur organized coastal cleanup program at Kovalam beach, Kanchipuram district supported by National Centre for Coastal Research (NCCR), MoES, Government of India being one of the responsible agencies for “coastal Clean Sea Campaign of UN and nodel agency for Marine Litter Program” of South Asian Co-operative Environmental program (SACEP).

