



SCE Newsletter

School of Civil Engineering (SCE)

Vision

To be internationally recognized in Civil Engineering for ground - breaking contributions, exceptional leadership, strong commitment to creative problem-solving and professional integrity.

Mission

Pioneering the emerging skills in Civil Engineering.

Preparedness to address the complex societal-scale challenges in areas of resilient infrastructure, smart and sustainable cities, water and energy security, climate change, mobility of goods and people, and environmental protection.

To inspire and nurture innovative leaders.



Dean's Message: It is my immense pleasure to welcome you to view the First Issue of e-Newsletter by School of Civil Engineering (SCE), Vellore Institute of Technology (VIT), Vellore, TamilNadu, India. We, at SCE, provides a conducive

learning environment to educate the students on their role in analysis, design, and construction & execution of different of projects in Civil Engineering arena. We also encourage the students to explore themselves in various disciplines of civil engineering through the courses and project components to face the challenges in near future. We have committed to provide excellent teaching, research and innovation, and the faculty inspires the students to translate the knowledge acquired to solve real-world problems. The school has specialized laboratories and research facilities that has enabled it to be at the cutting edge of Civil Engineering. The SCE is the right place to acquire the quality civil engineering education which is at par with International Standards. We are passionate about civil engineering education. We believe SCE will achieve great accomplishments on teaching and research to reward the support and care of the society. Apart from teaching activities, we, faculty, instigate and motivate the students to take part in make-a-thon and build-a-thon competitions in national and international levels. This e-newsletter focusses on research contributions of students in national and international levels, achievements of faculty members, International and National Conferences organised, workshops and guest lectures organised, research grants received from National and International funding agencies, publications and outreach activities. Moreover, this issue shares the effort taken by the faculty to organise industrial visits to connect the theory learned in class rooms and applications. I hope you enjoy reading the updates and achievements of students and faculty members of SCE.

Issue No. 01 July – September 2019



Govt. of India Recognizes VIT as an Institution of Eminence (IoE)

VIT- A place to learn; A chance to grow

Students' Achievements



Ms. Anu Mary Ealias (16PHD0429), Research Scholar (SRF- UGC MANF), who is working under the guidance of *Dr. M. P. Saravana Kumar*, Associate Professor, VIT is a recipient of Indo - US Fellowship for Women in STEMM (WISTEMM) - Women Overseas Student Internship Program supported by DST, India and implemented by Indo - US Science and Technology Forum (IUSSTF), to visit *University of California, Irvine, USA* for a duration of 6 months.



Junaid Nabi (17PHD0084), Research Scholar, who is working under the supervision of *Dr. Abdul Rahim*, Associate Professor, VIT received the CSIR - Senior Research Fellowship, Delhi, India for a period of 2 years. **R Anjali (17PHD0172)** Research Scholar who is working under the supervision of *Dr. Shantha Kumar*, Professor, VIT received CSIR – Senior Research Fellowship, Delhi, for a period of two years.



The B.Tech. students, **Kunal Kakria (17BCL0049)** & **N. Nithin Kumar (17BCL0063)**, have successfully completed the "Research Studentship Programme" in Department of Civil Engineering, Universiti Putra Malaysia (UPM), Malaysia in collaboration with Novapave Sdn. Bhd. for a period of 10 weeks. The study was on the possibilities of using Tyre Rubber as a filler in asphalt road construction and also the effect of fibre with different gradations in asphalt.

Jayashree Lakshmi Perumal (18BCL0169) has undergone "Research Studentship Programme" in Department of Earth Sciences, University of Pisa, Italy to work on the Indo-Italian project titled "Petro - Archaeometric Characterisation of Potteries from Excavated Sites at Alagankulam and Keeladi, TamilNadu, India " for a period of 10 weeks. She worked on mineral - petrographic characterisation of ancient ceramics, acquiring skills, and expertise in thin section analysis and X-ray diffraction data acquisition and processing.



Semester Abroad Programme (SAP)



The M.Tech – Structural Engineering students, **Subhashree Panda (18MST0008)**, **Kanak Sharad Nikam (18MST0007)** and **Faras Sahilhamad Shabbir (18MST0061)**, were selected for "Semester Abroad Programme (SAP)" in School of Sustainable and Built Environment, Fulton School of Engineering, Arizona State University, Arizona. They are pursuing their Master's Project under the supervision of *Prof. Narayanan Neithalath* and *Prof. Dr. Subramaniaam Rajan*.

The M.Tech – Energy and Environment Engineering student, **Aswathy Das A (18MEE0010)**, was selected for "Semester Abroad Programme (SAP)" in Department of Chemical Engineering, University of Saskatchewan, Canada under the supervision of *Prof. Dr. Venkatesh Meda*.



The M.Tech – Energy and Environment Engineering student, **Sanjila Neupane (18MEE0027)**, was selected for "Semester Abroad Programme (SAP)" in Department of Civil Engineering, Kathmandu University, Nepal.

The M.Tech – Energy and Environment Engineering student, **Vidisha Kashyap (18MEE0006)**, was selected for "Semester Abroad Programme (SAP)" within Department of Civil and Environmental Engineering, University of Utah under the supervision of *Prof. Dr. Ramesh Goel*.





We, School of Civil Engineering (SCE), Vellore Institute of Technology, have signed Memorandum of Understanding (MoU) with **Duke University** (i.e. acting through its *Center for Water, Sanitation, Hygiene, and Infectious Disease (WasSH-AiD)*, in Durham, North Carolina, USA) for activities include *Collaboration on air quality measurement for sanitation technologies and Pursuit of Joint Funded Projects related to engineered technologies and health.*

We, School of Civil Engineering (SCE), Vellore Institute of Technology, have signed Memorandum of Understanding (MoU) with Department of Civil Engineering, **Kathmandu University, Nepal** for activities include *faculty and student exchange, Joint Conference, and Joint Research and Publication.*

Faculty Achievements



Dr. B. Divya Priya, Assistant Professor (Senior), SCE, VIT, received “*Shree Gayathree Devi Award*” for the PhD Scholar in Civil Engineering with Best Academic Record for the period of 2019, from Shri. K. V. Rangasamy Advisor, L&T on 30th September 2019 at the 56th Convocation 2019, IIT Madras.



Dr. Sreevalsar Kolathayar, Associate Professor, SCE, VIT, is a recipient of ‘*IEI Young Engineers Award*’ in recognition for the contributions in the field of Civil Engineering from The Institution of Engineers India. Shri. B. Nainawala, Former Secretary to Govt. of India and currently Advisor to Chief Minister, Govt. of Gujarat presented the award on the occasion of 35th National Convention of Civil Engineers at Gujarat State Centre, Ahmedabad.

Research Grants

Dr. N. Vaani and Prof. Dr. P. Porchelvan received a funded project titled “*Estimation of Crop Water Productivity (CWP) in the major river basins of Tamil Nadu using geospatial technology*” from Indian Space Research Organisation (ISRO) under RESPOND Programme, worth of INR 19.64 Lakhs.

Dr. B. Sri Muruganandam received a grant worth of INR 38.586 Lakhs from SERB, Department of Science and Technology for project titled “*Assessment of Size Segregated Airborne Particulate Matter and its Health Effects*”.

Prof. Dr. S. S. Chandrasekaran, and Prof. Dr. G. P. Ganapathy from CDMM received a project titled “*Urban Seismic Risk Assessment*” worth of INR 19.88 lakhs from Indian Space Research Organisation (ISRO) under RESPOND Programme.

Dr. Parimala Renganayaki, received a grant of INR 6.86 Lakhs for project titled “*Fate and Transport of pesticides during bank filter from managed aquifer recharge*” under DAAD Program , Germany.

Prof. Dr. S. S. Chandrasekaran and Prof. Dr. S. Shantha Kumar in association with Centre for Disaster Mitigation and Management (CDMM) received an Indo Russia Bilateral Collaborative Research Project (DST - RSF) on “*Natural Hazards and Monitoring for Mountain Territories in Russia and India*” jointly with Vladikavkaz Scientific Center of the Russian Academy of Sciences (VSC RAS), Vladikavkaz, Russia. The total budget of the project is INR 2.30 Crores.

Dr. S. Thirumalini received a grant of INR 5.6 lakhs for project entitled “*Petro Archaeometric Characterization of Potteries from Excavated site at Algankulam and Keeladi, Tamil Nadu, India*” from University of Pisa, Italy.

International Conferences/Workshops Organized



The School of Civil Engineering, Vellore Institute of Technology organized a three days “**International conference on Recent Trends in Construction Materials and Structures**” (ICON2019), from 18 - 20 September 2019. The founder and Chancellor of VIT, **Dr. G. Viswanathan**, inaugurated the conference by lighting the Deepam in the presence of the Chief Guest, **Thiru P.G. Venkatram**, Chief Executive of L&T Infrastructural Engineering Ltd., Chennai.

Our chancellor, during his presidential address, he cited that “**Civil Engineering being the mother of all engineering branches will always subsist to show its prominence in this word**”. The Chief Guest, **Thiru P.G. Venkatram**, said that “**knowledge shared is knowledge multiplied**” and appreciated the organizers for this opportunity to share knowledge. The organisers are **Dr. A. Sofi**, Associate Professor & HOD, **Dr. T. Meena**, Associate Professor, and **Dr. J. Jayaprakash**, Professor, School of Civil Engineering, VIT. **Dr. M. Uma Shankar**, Associate Professor & HOD of Environmental and Water Resources Engineering, SCE delivered the Vote of Thanks in the Inaugural Session of ICON2019. This conference had four keynote speeches from eminent speakers **Dr. Choong Kok Keong**, Associate Professor, Universiti Sains Malaysia, & **Dr. Lau Hieng Ho**, Professor and Pro-Vice Chancellor, Swinburne University of Technology, Malaysia, **Dr. Prachand Man Pradhan**, Associate Professor, Kathmandu University, Nepal, and **Dr. Radhey Sharma**, Professor, West Virginia University, USA. We received 100 over abstracts from different Institutions across India and abroad. We eventually accepted a total of 52 manuscripts to present their papers in ICON2019.



One day workshop on “**3D Laser Scanning for Civil Engineering Application**” was organized and delivered by **Dr. S. Vasantha Kumar**, Associate Professor, School of Civil Engineering, VIT on 26 September 2019 for undergraduate, postgraduate students, and academics of VIT and other institution across India.



Dr. N. Senthil Kumar conducted five days “**Value Added Programme (VAP)**” on **Structural Analysis and Design using STAAD Pro Connect**

Edition from 31 August - 2 September 2019 & 7 - 8 September 2019, at VIT, Vellore. The VAP program was jointly organized by School of Civil Engineering and TechApps Consulting Services, Bentley Channel Partner, Chennai. The program focused on “**Analysis and Design of RC building and Industrial (Steel) buildings including Foundation**”. About fifty participants were attended the VAP workshop.

One day **ICON2019 Pre-Conference Workshop on “Characterisation and Microstructure Analysis of Concrete**” was organised by **Dr. A. Sofi**, **Dr. T. Meena** and **Prof. Dr. J. Jayaprakash**, School of Civil Engineering, VIT for undergraduate and postgraduate students, research scholars, academics from VIT and other Institutions. The speakers **Dr. Manusanthanam**, Professor, IIT Madras, **Dr. B. B. Das**, Associate Professor, NIT Karnataka, and **Dr. J. Karthikeyan**, Associate Professor, NIT Trichy have delivered a thought-provoking lectures. Over 80 participants attended the **ICON2019 – Pre-conference workshop Event** on 17 September 2019, VIT, Vellore.



Make-A-Thon Event



A technical Design Context namely **Make-A-Thon** was organised with 96 students from both UG and PG programmes of VIT. A total of 16 groups were participated and they have exhibited their creativity in all the five themes provided to them. The best design model was awarded with a cash prize of INR 6000. This event was organised by Dr. A. Sofi, Dr. T. Meena and Prof. Dr. J. Jayaprakash.

International Guest Lectures Organised



Prof. Dr. P. Porchelvan & Dr. S. Vasantha Kumar have conducted International invited lecture on ***“When Transport Infrastructures encounter water: Experiences and perspectives from the Indian Ocean Coast”*** by Dr. Malve Jacobsen, Department of Geography, Universität Bonn, Germany on 13 September 2019.



A lecture on ***“Evolvement of New Precast Retaining Wall Design: Malaysian Experience”*** was delivered by Dr. Choong Kok Keong, Associate Professor, Universiti Sains Malaysia to M.Tech Structural Engineering Students on 20 September 2019. This event was organized by Prof. Dr. J. Jayaprakash.

A guest lecture on ***“Construction Practices in Nepal and Earthquake Safety”*** was delivered by Prof. Dr. Prachand Man Pradhan, Kathmandu University, Nepal. (Organized by Dr. A. Sofi).



Delivered lecture on ***“Development of Flapping Wing Micro Air Vehicles”*** by Prof. Dr. Luung -Jieh Yang, Tamkang University, Taiwan on 8 August 2019 (Organized by Prof. Dr. G. Mohan Ganesh & Prof. Dr. A. S. Santhi).



A guest lecture on ***“Discovering the Medieval Landscapes of the Eastern Mediterranean”*** by Dr. Sam Turner, Professor of Archaeology, Newcastle University, UK on 18 July 2019 (Organized by Dr. S. Thirumalini & Mr. J. Simon)

Delivered lecture on ***“Retrofitting Techniques for Concrete Structures”*** by Dr. Prachand Man Pradhan, Kathmandu University, Nepal on 21 September 2019 (Organized by Dr. A. Sofi).

Delivered lecture on ***“Modelling of Groundwater Flow and Contaminant Transport”*** by Dr. Kartik Venkataraman, Tarleton State University Stephenville, Texas, United States on 23 September 2019 (Organized by Dr. S. Parimala Renganayaki).

National Guest Lectures Organised

Delivered lecture on **“Irrigation Structures & Hydraulic Model Studies”**, by Mr. C. Balalji, Institute of Hydraulics & Hydrology Poondi, Chennai on 21 October 2019 (Organized by Prof. Dr. P. Jagadeesh & Dr. Dillip kumar Barik).

Delivered lecture on **“Heritage management in India-Issues and Challenges”**, by Dr. M. Nambirajan, Archaeological Survey of India, New Delhi on 18 July 2019 (Organized by Dr. S. Thirumalini & Mr. J. Simon).

Delivered lecture on **“Advanced Construction Materials”**, by Mr. Ravishankkar Subramaniam, Techseal India Ltd., Chennai on 7 August 2019 (Organized by Dr. T. Shanmuga Priya & Dr. A. Punitha Kumar).

Delivered lecture on **“How to Prepare for Competitive Examination”**, by Mr. Kumar S Praveen, Assistant Director, Military Engineering Services 8 August 2019 (Organized by Dr. M. Muthukumar).

Delivered lecture on **“Energy Efficient Structures”**, by Dr. M. M. Vijayalakshmi, Sathyabama Institute of Science and Technology, Chennai on 14 August 2019 (Organized by Dr. M. Muthukumar).

Delivered lecture on **“Best Solid Waste Management Practices in India on PPP Framework”**, by Mr. Zaveri Chetan, Environment AECOM, Gurgaon 28 August 2019 (Organized by Dr. Bhaskar Das & Dr. J. Ranjitha).

Delivered lecture on **“Recent trends in water and wastewater treatment”**, by Mr. R. Venkatesa Perumal, WS Atkins, Chennai 28 August 2019 (Organized by Dr. S. Parimala Renganayaki).

Delivered lecture on **“Energy Efficiency in Buildings”**, by Dr. Sanjay Mathur, NIT Malaviya, Jaipur on 31 August 2019 (Organized by Dr. T. Shanmuga Priya).

Delivered lecture on **“Application of Remote Sensing in Groundwater Management**, by Dr. C. Pennan, IIT Bombay on 4 September 2019 (Organized by Dr. S. Vasantha Kumar).

Delivered lecture on **“GIS for Environment and Disaster Management”**, by Mr. A. Siva Kumar, Environmental and Geo Spatial Solutions, Chennai on 11 September 2019 (Organized by Dr. B. Divya Priya).

Delivered lecture on **“Introduction to Road Safety Audit and Sharing of Experience from Case Studies”**, by Dr. S. Velmurugan, CSIR-Central Road Research Institute (CRRI), New Delhi on 12 September 2019 (Organized by Dr. S. Vasantha Kumar & Dr. Sasanka Bhushan Pulipati).

Delivered lecture on **“Flood Forecasting and Management”**, by Ms. V. S. Jayasree, Larsen and Toubro Ltd., Chennai on 29 September 2019 (Organized by Dr. S. Mahenthiran & Dr. L. Vignesh RajKumar).

Delivered lecture on **“Flexible Pavement Design and Construction Practices”**, by Mr. Saravanan, Quality Control Division, Highways Department, Vellore on 25 September 2019 (Organized by Dr. Sasanka Bhushan Pulipati & Dr. S. Vasantha Kumar).

Delivered lecture on **“Design Flood Estimation and Management with special reference to Urban Hydrology and Design of Irrigation Structures”**, by Mr. R. Selvam, Larsen and Toubro Ltd., Chennai on 29 September 2019 (Organized by Dr. S. Mahenthiran & Dr. L. Vignesh RajKumar).

Faculty/Students Outreach



The Institution of Engineers (India) invited Dr. P. Porchelvan, Senior Professor, School of Civil Engineering, VIT for a Lecture Programme on **“Ground Water Research, and Rain Water Harvesting”** which was held on 21 August 2019 at BHEL Recreation Centre, BHEL Township, Ranipet.

Dr. S. Vasantha Kumar presented a paper entitled **“Effect of roadside friction elements on traffic characteristics of urban arterials - a systematic review and a pilot study”**, in International Conference on Innovative trends in Civil engineering for Sustainable Development (ITCSD - 2019) organized by NIT Warangal on 13 – 15 September, 2019.



The M.Tech students M. Manish Kumar (18MEE0014), Shashank Kiran Somwanshi (18MEE0019), and M. Monish Raj (18MEE0028) have presented the paper entitled **“Estimation of PM_{2.5} related hospital admissions and its monetary burden in Hyderabad, India”**, in National Conference on Futuristic Approaches in Civil Engineering (FACE-2019), Mahindra Ecole Centrale, Hyderabad, India 30-31 August, 2019. The other authors are N. Manojkumar, and Dr. B. Srimuruganandam.

Dr. S. Thirumalini delivered a guest lecture in National Seminar on Smart Sensing Technologies for Structural Health Monitoring, 26 – 27 September 2019.



Industrial Visit



A visit to Institute of Hydraulics and Hydrology and Poondi Dam & Reservoir, Poondi was organized for Undergraduate Students of Civil Engineering. The visit was coordinated by Dr P. Jagadeesh, Dr M. Umashankar, & Dr. Dilip Kumar Barik. The students were able to understand many hydraulic model studies carried out in the research station.

Dr. P. Sasanka Bhushan & Dr. S. Vasantha Kumar organized a visit to Highway construction works on 27 August 2019. The tour was hosted by Mr. Saravanan, ADE Department of Highways, TamilNadu and his team has taken nearly 60 students to their field and demonstrated various tests used for evaluating pavement materials and construction. The highlight of this tour was the visit to bitumen mixing plant located in Karasamangalam village, west of Katpadi, Vellore.



Dr. S. Thirumalini organized an Industrial visit to Railway Underway Bridge Construction at VIT on 25 September 2019 for undergraduate students.

Visit to Laboratories



During **ICON2019** event, the invited speaker Dr. Choong Kok Keong, Associate Professor, Universiti Sains Malaysia, & Dr. Lau Hieng Ho, Professor & Pro-Vice Chancellor, Swinburne University of Technology, Malaysia, and Dr. Prachand Man Pradhan, Associate Professor, Kathmandu University, Nepal have visited the Structural Engineering, Advanced Strength of Materials, Geotechnical, Surveying, and Computing laboratories of School of Civil Engineering, VIT (Organised by Prof. Dr. J. Jayaprakash, Dr. A. Sofi, & Dr. T. Meena).

- Vadivel S., Sennimalai C. S (2019). Failure mechanism of long-runout landslide triggered by Heavy Rainfall in Achanakkal, Nilgiris, India. *Journal of Geotechnical and Geoenvironmental Engineering*, 145(9), 1-14.
- Reddy A.N., Meena T (2019). A study on the effect of colloidal nano-silica on blended concrete containing fly ash and Alccofine. *Revista Romana de Materiale/Romanian Journal of Materials*, 7(2), 107-115.
- Janani S., Santhi A. S (2019). Multiple linear regression model to predict mechanical properties and impact resistance of hooked-end steel fibre-reinforced blended concrete. *Revista Romana de Materiale/Romanian Journal of Materials*, 49(2), 207 – 216.
- Ramadoss R., Ahamed A., Selvaraj T (2019). Alternative approach for traditional slaking and grinding of air lime mortar for restoration of Heritage Structures: Natural Polymer. *Journal of Architectural Engineering*. ([https://doi.org/10.1061/\(ASCE\)AE.1943-5568.0000361](https://doi.org/10.1061/(ASCE)AE.1943-5568.0000361)).
- Devarangadi M., Masilamani U.S (2019). Use of sawdust blended with bentonite and cement mixtures to retain diesel oil contaminants as a liner in a landfill. *Indian Geotechnical Journal* (<https://link.springer.com/article/10.1007%2Fs40098-019-00378-2>)
- Phanikumar B.R., Muthukumar M (2019). Influence of wetting–drying cycles on swell–shrink behaviour of GPA-reinforced expansive clay beds. *Geomechanics and Geoengineering* (<https://doi.org/10.1080/17486025.2019.1634288>).
- Reddy A.N., Meena T (2019). A study on influence of nano-silica on mechanical properties of blended concrete. *Journal of Computational and Theoretical Nanoscience*, 16(5), 2006-2011.
- Jose J., Srimuruganandam B., Nagendra S. M. S (2019). Characterization of PM10 and PM2.5 emission sources at Chennai, India *Nature Environment and Pollution Technology*, 18(2), 555-562.
- Varma K.G.R., Jagadeesh P (2019). Mechanical properties of sustainable concrete incorporating manufactured sand and rice husk ash, *International Journal of Engineering and Advanced Technology*, 8(2S2), 90-95.
- Shanmuga Priya T., Ramesh N., Agarwal A., Bhusnur S., Chaudhary (2019). Strength and durability characteristics of concrete made by micronized biomass silica and Bacteria-Bacillus sphaericus. *Construction and Building Materials*, 226, 827-838.
- Asrani N. P., Murali G., Abdelgader H. S., Parthiban K., Haridharan M. K., Karthikeyan K (2019). Investigation on Mode I Fracture Behavior of Hybrid Fiber-Reinforced Geopolymer Composites. *Arabian Journal for Science and Engineering*. 44, 10, 8545–8555.
- Dhamodharan A., Abinandan S., Aravind U., Ganapathy G. P., Shanthakumar S (2019). Distribution of Metal Contamination and Risk Indices Assessment of Surface Sediments from Cooum River, Chennai, India. *International Journal of Environmental Research*, 13(5), 853–860.
- Manojkumar N., Srimuruganandam B (2019). Health effects of particulate matter in major Indian cities. *International Journal of Environmental Health Research* (<https://doi.org/10.1080/09603123.2019.1651257>).
- Varghese J., Rehaan Chandan M., Shanthakumar S (2019). Fixed bed column study for pesticide removal using silver nanoparticles- embedded polyurethane foam and glass beads. *Journal of Chemical Engineering Communications* (<https://doi.org/10.1080/00986445.2019.1647181>).
- Chourasia A., Gupta S (2019). Influential parameters for headed bars in RC beam-column joint, *Current Science*, 116(10), 1666-1673.
- Teja K.V., Meena T (2019). An insight into temperature characteristics of ternary blended concrete with perlite powder. *Asian Journal of Civil Engineering* (<https://doi.org/10.1007/s42107-019-00179-1>
- Manojkumar N., Basha K., Srimuruganandam B. (2019). Assessment, Prediction and Mapping of Noise Levels in Vellore City, India. *Noise Mapping*, 6(1), 38–51.
- Awoyera P. O., Karthik S., Rao P. R. M., Gobinath R. (2019). Experimental and numerical analysis of large-scale bamboo-reinforced concrete beams containing crushed sand. *Innovative Infrastructure Solutions*, 4.41, 1-15.
- Kolathayar S., Aravind C. A., Shukla S.K (2019). Performance Assessment of Areca Leaf Grids for Soil Reinforcement Applications. *Journal of Natural Fibres* (<https://doi.org/10.1080/15440478.2019.1658253>).

Publications

- Devarangadi M., Shankar M. U (2019). Use of ground granulated blast furnace slag blended with bentonite and cement mixtures as a liner in a landfill to retain diesel oil contaminants. *Journal of Environmental Chemical Engineering*, 7(5), 103360.
- Anita Jessie J., Santhi A. S (2019). Effect of temperature on compressive strength of steel fibre reinforced concrete. *Journal of Applied Science and Engineering*, 22(2), 233-238.
- Chunchu B. R. K., Putta J (2019). Effect of recycled plastic granules as a partial substitute for natural resource sand on the durability of SCC. *Resources*, 8(3), 1-13.
- Kumar S. V., Sivanandan R (2019). Traffic congestion quantification for urban heterogeneous traffic using public transit buses as probes. *Periodica Polytechnica Transportation Engineering* (<https://doi.org/10.3311/PPtr.9218>)
- Shelar A., Mahindrakar A (2019). Practical scrutiny for concrete strength properties of ready-mix concrete plant from waste concrete aggregate. *International Journal of Innovative Technology and Exploring Engineering*, 8(10), 2931-2935.
- Prasanna Venkatesan R., Laxmana Kumara Lingan KSD (2019). Developing a lean model to reduce the design process cost of gas insulated switchgear foundation using value stream mapping – a case study. *International Journal of Construction Management* (<https://doi.org/10.1080/15623599.2019.1644756>).
- Gora A.M., Jaganathan J., Anwar M.P., Leung H.Y. (2019). Experimental studies and theoretical models for concrete columns confined with FRP composites: a review. *World Journal of Engineering*, 16(4), 509-525.

Photo Gallery



Editorial Board



Editor

Dr. S. Shantha Kumar
Professor & Dean SCE, VIT



Advisor

Dr. P. Porchelvan
Senior Professor, SCE, VIT

Editorial Team Members



Dr. J. Jayaprakash
(Co-ordinator)
Professor, SCE, VIT



Dr. M. Uma Shankar
*Head of Department of
Environmental and Water
Resources Engg.*
Assoc. Professor, SCE, VIT



Dr. A. Sofi
*Head of Department of Structural
and Geotechnical Engg.*
Assoc. Professor, SCE, VIT



Dr. S. Thirumalini
Assoc. Professor, SCE, VIT



Dr. M. Suneel Kumar
Assoc. Professor, SCE, VIT



Dr. S. Vasantha Kumar
Assoc. Professor, SCE, VIT

For further queries
e-mail: dean.sce@vit.ac.in
Contact No.: +91-416-2202222