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# **SCE e-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.

#### July – September 2020 Issue No. 05





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

It is my immense pleasure to welcome you all to view the fifth issue of SCE e-Newsletter by School of Civil Engineering Vellore Institute (SCE), of Technology (VIT),



Vellore, TamilNadu, India. This issue brings out the accomplishment of VIT citizens include the students and faculty of SCE that has transpired between July -September 2020.

I am very delighted to inform you that Vellore Institute of Technology has been ranked one among the top 9 out of 15 Institutions from India in Academic Ranking of World Universities by "SHANGHAI Ranking".

This issue highlights the active participation and contribution in various outreach activities by faculty members and achievements of undergraduate and postgraduate students. We, from the accomplishment of students, could able to see the students' dedication and their calibre in participating various challenging activites. Moreover, this SCE e-newsletter also focusses on guest lectures organized by faculty members, publications in high quality International and National Journals and faculty outreach.

I hope you all enjoy reading the updates and achievements of students and faculty members of SCE and extend your co-operation and support for the future.

> Dr. S. Shantha Kumar Professor & Dean, School of Engineering Vellore Institute of Technology, Vellore

# VIT- A place to learn; A chance to grow

## **Consultancy Projects**

Dr. S. Thirumalini, Associate Professor, SCE, VIT, Vellore received a consultancy project entitled 'Mineralogical studies on clay shale as supplementary cementing material: Investigation of thermal treatment, grinding, pigmentation, pozzolanic activity and strength' from FLSMITH Pvt. Ltd., Chennai worth of INR 14 Lakhs.

Dr. A. Punitha Kumar, Assistant Professor, SCE, VIT, Vellore received a consultancy project entitled 'Proof checking of structural drawings of 3MLD sewage treatment plant' from B & B Developers and Builders worth of INR 59,000.

Dr. A. Sofi, Associate Professor and Dr. A. Punitha Kumar, Assistant Professor, SCE, VIT, Vellore received a consultancy project entitled 'Design of Temple Chariot shed for Sri Cheena Kesava Perumal Koil Vadacheri Village, Thirupathur District' for worth of INR 29,500.

International/National Guest Lectures

Mr. Todd Litman, Founder and Executive Director of Victoria Transportation Policy Institute, Victoria, Canada delivered a lecture through online on 'Improving Transportation Efficiency through Transportation Demand Management' on 03 August 2020. (Organized by Dr. Sasanka Bhushan. Associate Professor. SCF. VIT. Vellore).





Delivered lecture on 'Tendering and Estimation', by Mr.Kumareshan Singaram, Senior Estimating and Tendering Manager, M/s. Al Naboodah Construction Group LLC, Dubai, on 12 September 2020 (Organized by Dr. A. Sofi, Associate Professor, SCE, VIT, Vellore).

Delivered lecture on 'Recent Advances in Geospatial Technology for Sustainable Development', by Dr. Nisar Ahamed PMP, Regional Manager and Sr. GIS Consultant to Middle East at Promax IT Solutions, Bengaluru, Karnataka, India on 29 July 2020 (Organized by Dr. B. Divya Priya, Assistant Professor, SCE, VIT, Vellore).

Delivered Lecture on online 'Applications of Drones in Urban planning' by Hari Rajan, UAV/Drone Pilot & Geospatial Data scientist, Market ResearchZain Drone, Kuwait on 01 August 2020 (Organized by Mrs. Vani, CDMM and Dr. T. Meena, Associate Professor, SCE, VIT, Vellore).

Delivered lecture on 'Community Resilience to Disaster Risks and Addressing Vulnerable Groups', by Mr. Joe John George, State Project Officer, Kerala State Disaster Management Authority, Government of Kerala, Thiruvananthapuram, Kerala, India on 09 September 2020 (Organized by Dr. B. Divya Priya, Assistant Professor, SCE, VIT, Vellore).

Delivered lecture on 'Construction Project Scheduling and Management - Case studies', by Ms. Swathi Santosh Kurumoji, Manager, Larsen & Toubro Construction, Chennai, on 09 September 2020 (Organized by Dr. T. Shanmuga Priya, Associate Professor, SCE, VIT, Vellore).

## **Faculty Development Programme**

FDP

Prof. Samuel Johnson, VIT AP Campus delivered half a day Faculty development Programme (FDP) on 'Online Live Whiteboard and Lucid chart for teaching and writing Technology' during 04 July 2020 at VIT, Vellore. More than 25 members were participated in this event. (Organized by Dr. A. Sofi, Associate Professor & HOD, SCE, VIT, Vellore).

Page 2

**SCE e-Newsletter** 

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Vali, K. S., Murugan, B. S., Reddy, S. K., Farsangi, E. N. (2020). Eco-friendly hybrid concrete using pozzolanic binder and glass fibres, International Journal of Engineering, Transactions A: Basics, 7, 1183-1191.

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# **Publications**

Mamaheswari, J., Shanthakumar, S. (2020). Paddy-soaked rice mill wastewater treatment by phytoremediation and feasibility study on use of algal biomass as bio fertilizer, Journal of Chemical Technology and Biotechnology, (https://doi.org/10.1002/jctb.6551).

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Velvizhi, G., Shanthakumar, S., Das, B., Pugazhendhi, A., Shanmuga Priya, T., Ashok, B., Nanthagopal, K., Vignesh, R., Karthick, C. (2020). Biodegradable and non-biodegradable fraction of municipal solid waste for multifaceted applications through a closed loop integrated refinery platform: Paving a path towards circular economy, Science of the Total Environment, 725, 138049.

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Silvia, L., Eleonora, O., Jayashree, L., Jeannette, J. L., Erika, R., Marta, M. L., Thirumalini, S., Maria, P. C., Simon, R. (2020). Indian ocean trade connections: characterization and commercial routes of torpedo jars, Heritage Science, 8(1), (https://doi.org/10.1186/s40494-020-00425-9).

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Page 4

SCE e-Newsletter

# **Publications**

Rishudh, T. and Barik, D. K. (2020). Impact of temporal variation of land use/land cover and precipitation on runoff estimation in an ungauged hilly watershed in kodagu. In: Rosanna, La P and John, J. Ramirez-Avila (eds) Proceedings of Watershed Management Conference 2020, A Clear Vision of Watershed Management, Organised by Environmental Water Resources Institute (EWRI), World Environment and Water Resources Congress, Published by ASCE, 265-277, (https://doi.org/10.1061/9780784483060).

#### Outreach

Dr. Dillip Kumar Barik, Associate Professor, SCE, VIT, Vellore was invited by YMCA Health and Healthy Living Centre, Vellore as an expert to deliver a lecture on 'Climate Change and Its Crisis' in one day Webinar on 18 July 2020.

Dr. S. Vasantha Kumar, Associate Professor, SCE, VIT, Vellore delivered three guest lectures on 24 July, 29 August, & 26 September, 2020 in Series 1, 2 & 3 respectively on the topic 'Intelligent Transportation Systems (ITS) and its Applications for Sustainable Transport' during AICTE Sponsored One week Online Short-Term Training Programme on "Sustainable Transport for Smart Cities organized by St. Peter's College of Engineering and Technology, Chennai.

Dr. S. Thirumalini, Associate Professor, SCE, VIT, Vellore delivered a lecture on 'Characterisation study on heritage materials' at National Level One Week Virtual Faculty Development Program on Advances in Civil Engineering (ACE'20) at Rajalakshmi Engineering college, Chennai, on 25 July 2020.

Dr. L. Vignesh Rajkumar, Assistant Professor, SCE, VIT, Vellore was invited to deliver an expert lecture on the topic 'Overview of RS & GIS Applications in Groundwater Studies' in One Week Online Short Term Training programme on Application of Remote Sensing in Soil and Groundwater Contamination Assessment Organized by Department of Civil Engineering, Sri Krishna College of Engineering and Technology, Coimbatore from 27 July - 01 August 2020 (Series I) and 03 - 8 August 2020 (Series II).

Dr. P. Sasanka Bhushan and Dr. Dillip Kumar Barik, Associate Professor, SCE, VIT, Vellore were invited as a judge for 'Smart India Hackathon 2020 Grand Finale', which was organized by MHRD and others on 01 - 03 August 2020.

Prof. S. Shantha Kumar, SCE, VIT, Vellore was invited as an External Examiner to evaluate the final year project work done by students of M.E. Environmental Engineering programme at Kumaraguru College of Technology, Coimbatore, Tamil Nadu during 02 - 03 September 2020.

Dr. S. Thirumalini, Associate Professor, SCE, VIT, Vellore delivered a guest lecture on 'Traditional Building Materials to M.Arch Students at Center for Heritage conservation', Centre for Environmental Planning and Technology, (CEPT) Ahmedabad on 31 August 2020.

Dr. S. Vasantha Kumar, Associate Professor, SCE, VIT, Vellore delivered a guest lecture on 08 September, 2020 on 'Role of Geomatics in Disaster mitigation and management' at AICTE Sponsored One week Online Short-Term Training Programme on Disaster mitigation: A shift from disaster management towards preparedness – Series 1 organized by B. S. Abdur Rahman Crescent Institute of Science and Technology, Chennai.

Dr. S. Vasantha Kumar, Associate Professor, SCE, VIT, Vellore delivered a guest lecture on 16 September, 2020 on 'Application of Geomatics in Natural Disaster Management' at AICTE Sponsored One week Online Short-Term Training Programme on Disaster Mitigation and Management - Phase II organized by KPR Institute of Engineering and Technology, Coimbatore.

Page 5

SCE e-Newsletter

# **Other Related Information**

Prof. Dr. S. Shantha Kumar, SCE, VIT has been granted 'Fellow' in The Institution of Engineers (India).

Dr. B. Srimuruganandam, Associate Professor, SCE, VIT, Vellore has been nominated as one of the Smart City Advisory Forum Committee Members (under Technical Expert Category) for Vellore Smart City Project by Government of TamilNadu.

Prof. Dr. J. Jayaprakash, SCE, VIT, Vellore has nominated as a Technical Committee Member of 2020 International Conference on Applied Mechanics, Materials and Civil Engineering (ICAMMCE2020), 20-21 September, 2020.

Dr. Dillip Kumar Barik, Associate Professor, SCE, VIT, Vellore has participated in a Virtual GIS Conference 'Esri UC India Live 2020' from 14 - 16 July 2020.

Prof. P. Porchelvan and Dr. Dillip Kumar Barik, Associate Professor, SCE, VIT, Vellore has participated in online webinar programme on 'Cloud blast and Flood' on 21 July 2020 organised by National Institute of Disaster Management, Ministry of Home Affairs, Govt. of India, in collaboration with Indian Meteorological Department, Ministry of Earth Science, Govt. of India.

Dr. Dillip Kumar Barik, Associate Professor, SCE, VIT, Vellore has participated in the online webinar programme on 'Climate Change and Extreme Weather Events' and 'Earthquake Monitoring and Management' on 4 & 11 August 2020 organised by National Institute of Disaster Management, Ministry of Home Affairs, Govt. of India, in collaboration with Indian Meteorological Department, Ministry of Earth Science, Govt. of India.

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SCE e-Newsletter

Issue No. 05