Sri Venkateswara College of Engineering

Volume 5 Issue 2

JULY-OCT '22

HORIZON

NEWSLETTER

Department of Civil Engineering

CONTENTS

EDITORIAL BOARD

DEPARTMENT VISION & MISSION

VISION

To become a department of excellence in Civil Engineering education and research producing globally competent civil engineers to serve the industry and society.

MISSION

- Providing state-of-the art resources that contribute to an excellent learning environment.
- Imparting necessary skills, cultivating moral and ethical values.
- Establishing regular interaction and collaboration with industries.
- Motivating the students to take up competitive exams and pursue higher education.
- Promoting research and development activities in emerging areas of civil engineering and offering services to society and industry through education, research and consultancy activities.

GRANTS RECEIVED

- The project titled "Mix Optimization and design guidelines for fully recycled geopolymer concrete" submitted by Dr. R. Kumutha, Prof. & HOD/Civil has been approved by **Science and Engineering Research Board (SERB) for funding under the Teachers Associateship for Research Excellence (TARE) for a period of 3 years** through File No: TAR/2022/000091 Dt. 06/10/2022. The funding includes research grant, fellowship and overhead charges as per SERB-TARE norms.

- Dr. R.Kumutha received a grant of **Rs. 1,50,000/-** under "Assistance to Professional bodies and Seminar/Symposia Scheme from **SERB** for organizing a **National Conference titled "Smart and energy efficient construction Materials and Technologies for Sustainable Infrastructure"** through File Number: SSY/2022/000612 dt. 28/09/2022

LECTURES DELIVERED

Dr. R.Kumutha delivered the keynote speech on " "**Fibre Reinforced Polymers for R.C. Columns Applications and Challenges**" in the 11th Spring world congress on Engineering and Technology (SCET2022) held during Aug 13-15, 2022 in Xiemen, China *(Online)*

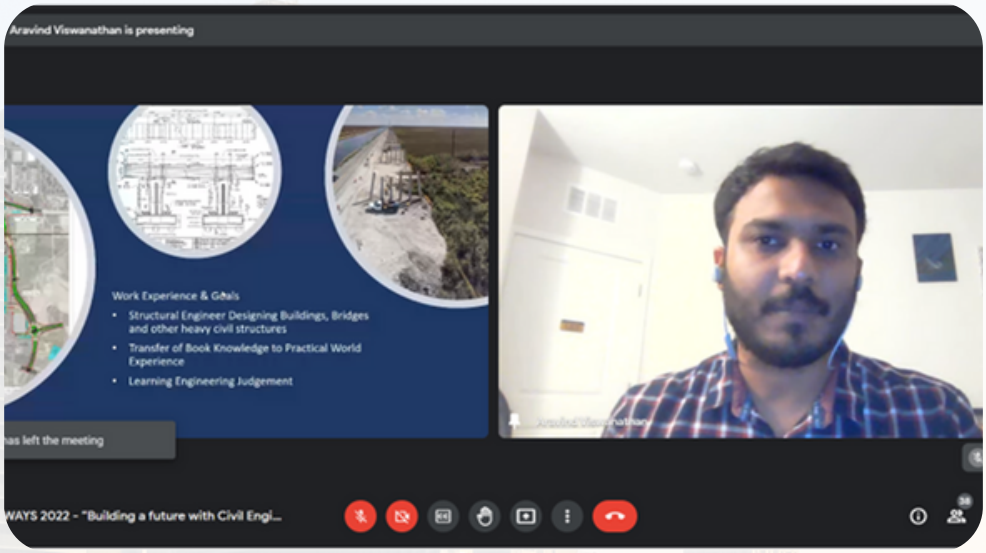
PROGRAMS ORGANISED

A Webinar on "**Pathways 2022 – Building a future with Civil Engineering**" was organised by the Deparmtnet of Civil Engineering on 15.07.2022 for the school students and their parents .

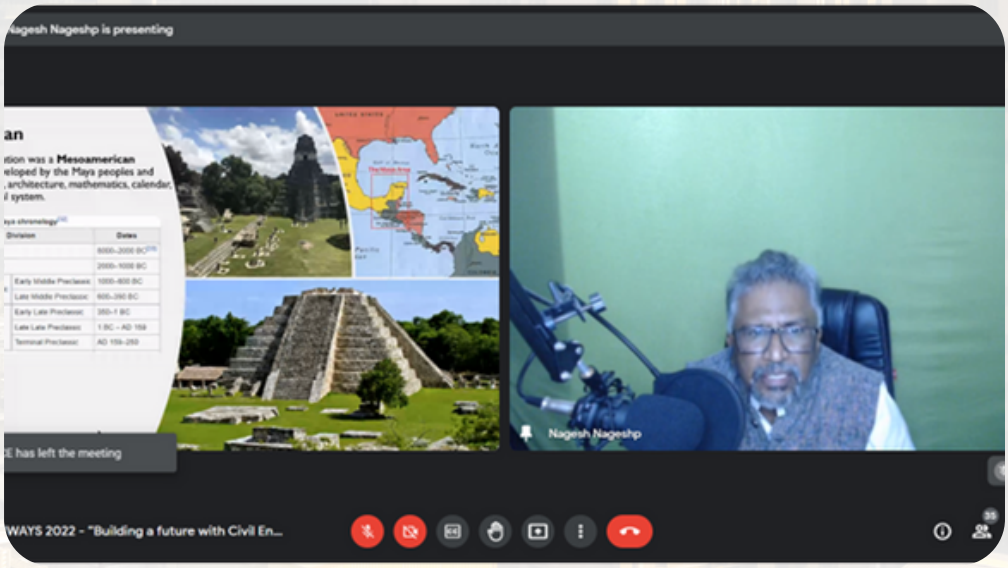
Speakers:

- Dr.R. Kumutha, Professor & Head / Civil Engineering, SVCE.
- Mr.Aravind Viswanathan, (2011-15 batch), Structural Engineer, OM Engineering Services, Inc, Orlando, USA
- Mr. Nagesh Puttaswamy, Zonal Head South, White Topping & RMD, Ultratech Cement Ltd.
- Ms. Ruby Freya, Assistant Professor / Civil Engineering, SVCE.
- Ms. G. Dharshini, IV Year Student
- Ms. H. Nancy, IV Year Student
- Dr. M. Selvakumar, Assistant HoD, Associate Professor, SVCE.

PROGRAMS ORGANISED



Pathways '22



PROGRAMS ORGANISED

A Workshop on "**BIM and Quantity Estimation**" was organized by the Department of Civil Engineering and delivered by Mr. Thiyagarajan, Tech Lead Civil, CADD Centre, Chennai on 29.08.2022 at CADD Lab, SVCE. The program was organized by Dr.R.Kumutha, Professor & Head/Civil Engineering and coordinated by Mr. A.Vijay Vignesh (AP/Civil).

PROGRAMS ORGANISED

A Guest Lecture on "**Transport Demand Management**" was delivered by **Dr. Andreas RAU**, Faculty Head and Principal Investigator (Rail, Transport & Logistics), **TUM Asia, Singapore**. On 02-09-2022 at Placement Cell SVCE by the Department of Civil Engineering & Training and Placement Cell.

PROGRAMS ORGANISED

An Expert Lecture on the eve of "**Concrete Day Celebrations 2022**" was organized by the Department of Civil Engineering in association with Indian Concrete Institute on 07.09.2022.

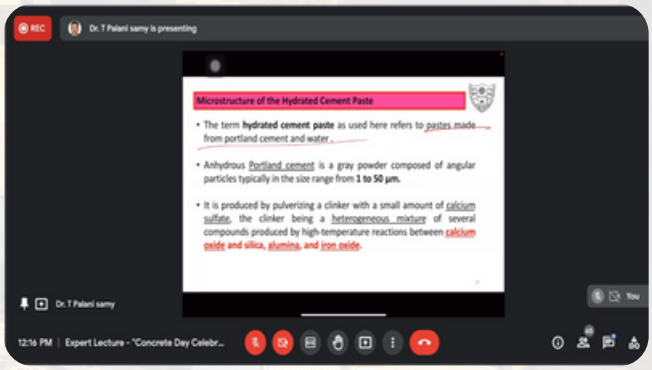
Session 1: **Micro Characterization of Concrete**

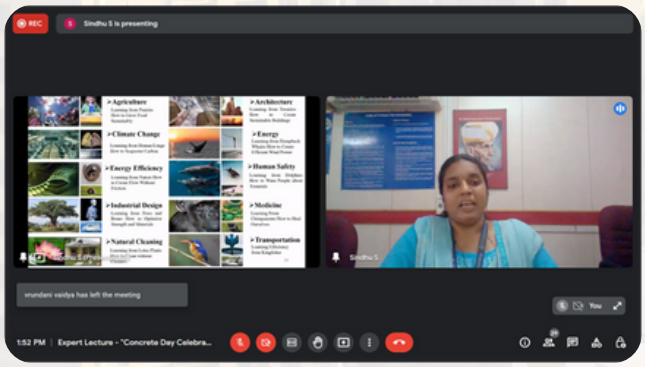
Speaker: Dr. T. Palanisamy, Assistant Professor, Department of Civil Engineering, National Institute of Technology Karnataka, Surathkal.

Session 2: **Biomimicry - Providing a Concrete Solution to a Global Problem**

Speaker: Dr. S. Sindhu Nachiar, Executive Member - ICI Chennai Centre, Assistant Professor, Department of Civil Engineering, SRM Institute of Science & Technology, Chennai

This program was organized by Dr.R.Kumutha (HoD/Civil) & coordinated by Mr. A.Vijay Vignesh (AP/Civil).





RESEARCH ACTIVITES

Mr. G. Arun & Mr. R. Mathiyazhagan AP/CVE published a patent titled "**Optimized Geo-Polymer Concrete With Slag And Fly-Ash Blends Under Ambient Temperature**"

FACULTY DEVELOPMENT

- Mr. A. Vijay Vignesh has completed the **AICTE – NITTT Course Module 1 and 2** (Module 1 - Orientation Towards Technical Education and Curriculum Aspects, Module 2 - Professional Ethics and Sustainability)

- Ms. K. Sathyapriya has completed **NITTT Module 7** - Creative Problem Solving, Innovation and Meaningful R & D and Module 8 -Institutional Management & Administrative Procedures.

- Mr.S.Diravia Balan has completed **NITTT Module 7** - Creative Problem Solving, Innovation and Meaningful R & D and Module 5 - Technology Enabled Learning and Life long self Learning.

- Mr.A.Vijay Vignesh successfully completed Innovation Ambassador (IA) training **"Advanced Level"** conducted by MoE's Innovation Cell & AICTE during 2021-2022.

- Mr. KALAIVANNAN R has participated in one day online workshop titled "**Water Quality studies using Hyperspectral Remote Sensing for the Indian Coastal and Inland Waters**" conducted by IIRS on 05-08-2022.

FACULTY DEVELOPMENT

- Dr. R. Kumutha participated in L&T EduTech - Naan Mudhalvan Training of Trainers Program for "**High Rise Building Design**" held between 19th to 22nd September 2022.

- Ms. Ruby Freya participated in L&T EduTech - Naan Mudhalvan Training of Trainers Program for "**Design & Construction of Steel Buildings**" held between 19th to 22nd September 2022.

- Mr. A.Vijay Vignesh participated in L&T EduTech - Naan Mudhalvan Training of Trainers Program for "**Building Information Modeling**" held between 19th to 22nd September 2022.

- Mr. A. Vijay Vignesh participated in the One Day Workshop on "**Curriculum Design**" organized by Sri Venkateswara College of Engineering from 18.10.2022.

- Mr. R.Rajesh successfully completed 4 weeks NPTEL course on "**GPS Surveying**"

CEA ACTIVITIES

A **Build-O-Quiz** (Technical Quiz) competition was organized by the Department of Civil Engineering in association with Indian Concrete Institute on 07.09.2022 (10.30 - 11 A.M.) for civil department students.

Theme : Concrete Technology.

Winners list:

First Place : A. JENISHA (Final Year Student)

Second Place : LALEETH KUMAR D (Final Year Student)

Third Place : LALITH KUMAR T (Final Year Student) & DHANUSH KANNAN L (Third Year Student)

STUDENTS ACTIVITIES

- Praveen Kumar D (II Year), Syed Afrideen M (II Year), Monica V (II Year), Prathiba S (II Year), Ramana R (II Year), Amaravathy U (II Year) has completed the Online Training Programme on "**Billing Engineer**" from 16.07.2022 to 23.07.2022 conducted by Construction Management Training Institute, Bengaluru (CMTI).

- Hemalatha R and Jenani M have participated in the **Blog Writing Contest** conducted by Construction Management Training Institute, Bengaluru (CMTI) on 15th September 2022.

- The following students (III Year) enrolled as **ICI Student Membership**.

    1. BHARANIDHARAN B
    2. HARIHARAN V
    3. HEMALATHA R
    4. JENANI M
    5. GOPINATH A V
    6. RANJANA PRIYADARSHINI R
    7. VIGNESH A
    8. GOWTHAM S
    9. YOKESH J P
    10. DHANUSH AUROBINDO J
    11. KEERTHIVAASAN R

PROGRAM OUTCOMES (POs)

Students in the Civil Engineering program should, at the time of their graduation, be able to

- Apply the knowledge of mathematics, science, engineering fundamentals and concepts of Civil Engineering to the solution of complex engineering problems. **(Engineering knowledge)**
- Identify, formulate, review research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences. **(Problem analysis)**
- Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations. **(Design/Development of Solutions)**
- Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions for complex problems. **(Conduct Investigations of Complex Problems)**
- Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations. **(Modern Tool Usage)**
- Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice. **(The Engineer and Society)**
- Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development. **(Environment and Sustainability)**
- Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice. **(Ethics)**
- Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings. **(Individual and Team Work)**
- Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions. **(Communication)**
- Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments. **(Project Management and Finance)**
- Recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change. **(Life-long Learning)**

PROGRAM SPECIFIC OUTCOMES (PSOs)

Students in the Civil Engineering program should, at the time of their graduation, be able to

- Provide solutions for real life problems related to core areas of civil engineering by applying knowledge of mathematics, Basic and Engineering Sciences and by using appropriate engineering tools.
- Plan, analyse, design, execute and manage infrastructure projects considering safety, societal and environmental factors.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

Civil Engineering graduates during the first few years of graduation will:

- Practice civil engineering in construction industry, government or public sector undertakings by applying ethical principles and following norms of civil engineering practice.
- Pursue higher education and research to hone-up latest civil engineering technologies and to adapt to the changing global scenario.
- Exhibit leadership and team working skills as an entreprenuer with demonstrable attributes to contribute to the societal needs.