The Institution of Engineers (India)

A Century of Service to the Nation

Two days All India Workshop

on

Perspectives of Microbial Concrete & other Sustainable Construction Materials

30th & 31st July 2024 Chennai

Organized by



THE INSTITUTION OF ENGINEERS (INDIA) TAMIL NADU STATE CENTRE

Under the Aegis of

Civil Engineering Division, IE(I)

In association with



SRM VALLIAMMAI ENGINEERING COLLEGE

(AN AUTONOMOUS INSTITUTION)

APPROVED BY AICTE, AFFILIATED TO ANNA UNIVERSITY, ACCREDITED BY NBA,
'A' GRADE ACCREDITATION BY NAAC AND

ISO9001:2015 CERTIFIED INSTITUTION, SRM NAGAR,
KATTANKULATHUR-603203, KANCHIPURAM DISTRICT, TAMILNADU.

Venue: Seminar Hall

SRM Valliammai Engineering College
Kattankulathur-603 203

About The Institution of Engineers (India)

The Institution of Engineers (India) or IEI is the largest multidisciplinary professional body that encompasses 15 engineering disciplines and gives engineers a global platform for sharing professional interest. IEI has membership strength of above 0.8 million. Established in 1920, with its headquarter Kolkata, IEI has served the engineering fraternity close to a century. During this period of time, IEI has been inextricably linked with the history of modern-day engineering.

In 1935, IEI was incorporated by Royal Charter and remains the only professional body in India which has been accorded this honour. Today, its quest for professional excellence has given it a place of pride in almost every prestigious and relevant organization across the globe. It provides a vast array of technical, professional and supporting services to the Government, Industries, Academia and the Engineering fraternity, operating through its 124 Centres located across the country and 6 overseas chapters. Besides, IEI has bilateral agreements with about 31 international bodies and membership of another 8 international bodies of the developed nations across the globe.

Being recognized as a Scientific and Research Organization (SIRO) by the Department of Scientific and Industrial Research, Ministry of Science and Technology, Government of India, IEI promotes the cause of research and development by providing Grant-in-Aid support to undergraduate, post graduate students and PhD Research Scholars of Engineering Institutions and Universities.

IEI has been recognized as Scientific and Industrial Research Organization (SIRO) by the Ministry of Science & Technology, Government of India and besides conducting its' own research, provides Grant-in-Aid to UG/PG/PhD students of Engineering institutes and Universities.

IEI holds the International Professional Engineers (IntPE) Register for India under the global International Professional Engineers Alliance (IntPEA). The institution also awards the Professional Engineers (PE) Certification.

IEI in collaboration with Springer regularly publishes peer-reviewed international journal in five series, namely, Series A, Series B, Series C, Series D and Series E covering fifteen engineering disciplines.

ABOUT TAMILNADU STATE CENTRE

The Tamil Nadu State Centre was established originally as the Southern India Centre at Chennai on 22nd December 1922. The Southern Region covered the erstwhile Madras, Andhra, Mysore, Hyderabad and Travancore – Cochin. As more centres were opened in the Southern Region, it was renamed as Madras Centre and later became the Tamil Nadu State Centre. Tamil Nadu State Centre has a special significance in the formation of the Institution; for the IEI was registered in 1920 in the then Madras Province at Chennai. The registered office was subsequently moved to Calcutta the Head Quarters of IEI. The Chief Guest for the Inaugural Function of the Annual General Session of IEI Madras Centre in 1959 was Thiru K Kamaraj, Chief Minister of Tamil Nadu. The Tamil Nadu State Centre is the most active centre in the country and has been serving the society in general and the engineering community in particular with the said objectives and plays a significant role in dissemination and proliferation of knowledge amongst its members. With a modest membership to start with, the centre has brought into its fold a large section of fraternity with a membership strength of more than 30000 Corporate Members and more than 80000 Non – Corporate Members widening its horizon of technical activities. The centre has established sixteen Local Centres at Neyveli, Madurai,

Coimbatore, Tiruchirappalli, Salem, Kalpakkam, Ranipet, Tuticorin, Hosur, Kanyakumari, Tirunelveli, Thiruvallur, Kanchepuram, Thanjavur, Erode and Kattankulathur to serve more professional groups. The major activities of the Division include: Annual National Conventions, Annual & Semi-Annual Paper Meetings, Publication of Journals, Workshops / Seminars and Symposia and Prizes and Awards.

ABOUT SRM VALLIAMMAI ENGINEERING COLLEGE

SRM Valliammai Engineering College stands as a premier institute within the SRM group of educational institutions. Founded in 1999 by Dr. T. R. Pariventhar, a renowned educationist, and sponsored by the Valliammai Society, the college is committed to delivering top-quality education across various disciplines. It holds a distinguished status with recognition under 2(f) & 12(B) by the University Grants Commission, New Delhi, and is an ISO 9001-2015 Certified Institute. The college's strong ties with numerous R&D institutions and higher learning establishments in India foster an environment of academic collaboration and growth. As part of its college social responsibility, the institute actively engages in serving the rural communities surrounding its campus. Offering 11 undergraduate courses and 9 postgraduate courses, the institution operates autonomously with approval from AICTE, accreditation by NAAC with an 'A' grade, NBA accreditation, and affiliation with Anna University, Chennai. 9 departments are recognized as Research Centers by Anna University.

The Department of Civil Engineering, established in 2009 with an initial intake of 60 students, now offers two undergraduate programs—B.E. Civil Engineering and B.Tech Agricultural Engineering—along with a postgraduate program in M.E. Structural Engineering. The department has consistently excelled in academics and placements, producing university rank holders annually. To enrich faculty knowledge and enhance student learning experiences, the department conducts various training programs, faculty development programs (FDPs), workshops, seminars, and value-added courses every semester. It has been honored with the 'Best Division Award' and the 'Best Civil Engineering Student Chapter Award' by IE(I) in 2017 & 2018. Noteworthy events organized by the department include Anna University Sponsored Faculty Development Training Programs, CSIR sponsored national seminars, and AICTE & ISTE sponsored Faculty Induction Programs. Equipped with state-of-the-art laboratories featuring the latest equipment, the department provides students with an excellent learning environment to prepare for dynamic and fulfilling careers in the civil engineering domain.

ABOUT THE THEME:

The main objective of this workshop is to provide a technical exchange on areas of technology that impact the construction industry and Equipping participants with required skills and knowledge on the key developments and technical advancements in Civil Engineering Technologies like self-healing of concrete through microbial based carbonate precipitation, Modeling and simulation of the phenomena underlying microbial based healing of concrete, Microorganisms for the production of bio construction materials, Potential of Bacterial Concrete, Microbes for Sustainable Construction. This workshop will provide a unique opportunity for classification societies, industry groups, standards development organizations, governments and interested members of the public to come together for a professional exchange on topics ranging from technological impacts to the Civil Engineering industry. This workshop is comprised of a series of panel sessions carried over a two-day period covering a variety of topics.

Target Audience:

This workshop will provide a platform for interaction and exchange of ideas on Latest Civil Engineering Perspectives of Microbial concrete & other sustainable construction materials. It is also intended to motivate the research scholars, academicians, industrial persons, professionals and students to equip themselves with strong knowledge about the various advanced Civil Engineering technologies focused.

Sub Themes:

- ➤ Bio Concrete as the sustainable material
- > Impact on the Construction Industry on the Environment
- > Sustainable construction materials
- ➤ Need for Sustainable Construction Industry
- > Green Concrete
- ➤ Self-Healing Concrete
- > Impact of Concrete on Environment
- ➤ Bio Concrete and its Composition
- ➤ Benefits of Bio Concrete & Applications of Microbial Concrete

Call for Papers

All interested participants are requested to contribute technical/ research papers and case studies detailing concept, innovation, idea or practical experiences for oral presentation. Each paper should begin with a synopsis of about 200 words and preferably within 3000 words excluding figures, tables and references. Papers can be send to **ieitamilnadu@gmail.com**.

Closing Dates for Papers

Submission of Abstract : 30th June 2024

Communication of Acceptance of Abstract : 5th July 2024

Submission of Full Length Paper : 15th July 2024

For Guidelines for Submission of Papers scan the QR Code



https://www.ieindia.org/webui/IEI-Activities.aspx#Call Papers

REGISTRATION FEE

| IEI Members | INR 590.00 | Research Scholars | INR 885.00 |
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The Honorary Secretary

Cheques are acceptable.

All India Workshop on Perspectives of Microbial Concrete & other Sustainable Construction Materials

The Institution of Engineers (India)

Tamil Nadu State Centre 30th & 31st July 2024

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