Resource Persons:

- ➤ Dr. Rahul A V, Assistant Professor, IIT Tirupati
- > Dr. Manu K Mohan, Ghent University, Belgium
- Mr. Rohit B Anandan, Architect Tvasta
- Dr. Robert V.Thomas, Regional Engineer, Kerala State Nirmithi Kendra, Ernakulam
- ➤ Mr. Mahesh C, Assistant Professor (CSE), Faculty Incharge- FAB Lab, FISAT

Schedule:

Day I - 17th January, 2024

10 am - 11 am : Inauguration

11.15 am - 12.45 pm: Keynote Session I, Dr. Rahul A V

1.30 pm - 3.00 pm : Keynote Session 2, Dr. Manu 3.15 pm - 4.30 pm : Keynote Session 3, FAB Lab

Day 2 - 18th January, 2024

10 am - 11 am : Keynote Session 4, Tvasta Official

 $11.15\,am\text{--}4.30\,pm\ :\ 3D\,Printing\,Site\,Visit$

Day 3 - 19th January, 2024

10 am - 11 am : Keynote Session 5, Dr. Robert
11 am - 12.45 pm : Session 1 at FAB Lab, FISAT

1.30 pm - 4.30 pm : Session2 at FAB Lab, FISAT

Target Audience

Practising Engineers, Faculty members of AICTE approved Engineering Colleges, Research Scholars and PG Students.

Registration:

Link for Registration: https://forms.gle/VvpT9HPkGhT7UDMr7

Registration Fees:

Rs. 500/- Faculty Members and Students of AICTE approved institutions

Rs. 1000/- Industry Experts/Entrepreneurs





Advisory Committee Members

Patron - Mr. Shimith P R, Chairman

Dr. Mini P R, Principal(in-charge)

Dr. C Sheela, Director(R&D)

Dr. Unni Kartha G, Dean (Academics)

Dr. Jiji Antony, HoD (CE)

Core Committee Members

Dr. Kavitha P E. Associate Professor

Dr. Asha Joseph, Associate Professor

Dr. Beena B R, Assistant Professor

Ms. Rinu J Achison, Assistant Professor

Contact Details:

Dr. Kavitha P E.

Associate Professor, Dept. of Civil Engg., FISAT, Ph. No. 09446986225, email: kavithape@fisat.ac.in / civil@fisat.ac.in





DEPARTMENT OF CIVIL ENGINEERING



Three Days National Seminar on RECENT ADVANCES IN 3D PRINTING OF BUILDINGS

Co-Sponsored by



In association with

RESEARCH AND DEVELOPMENT CELL, FISAT

Association of Civil Engineers-FISAT, Student chapters of ASCE, ICI and BAI, IGBC FISAT Chapter, ISTE FISAT Chapter, IEI Kochi Centre













About FISAT

The Federal Institute of Science and Technology (FISAT) is a leading self-financing private engineering college located in Mookannoor, Kerala, established by the Federal Bank Officers' Association Educational Society (FBOAES). It's affiliated with APJ Abdul Kalam Technological University and approved by AICTE, offering seven B.Tech programs, an MBA program with various specializations, an MCA program, five M.Tech programs, and PhD opportunities. Founded in 2002, FISAT strives to be a "Centre of Excellence" in professional education, emphasizing "Focus on Excellence." Accredited by NAAC with an 'A+' grade, and with NBA accreditation for five B.Tech programs, it upholds high-quality education.

Our Vision

To become a world-class professional institute with a focus on excellence, molding committed global professionals and technocrats who can meet the demands of business, industry and research.

Our Mission

To transform into an advanced center of technical education, which will, in turn, bring out professionals with superior skills and social commitment.

To provide state-of-the-art facilities to mold brilliant young talents, enabling them to take up challenging assignments in the highly competitive global scenario.

About Department

The Civil Engineering Department launched its B.Tech program in 2011, starting with 60 students and expanding to 120 in 2013. In 2014, an M.Tech

program in Structural Engineering and Construction Management with 24 seats was introduced. The department is research centre in Civil Engineering with three KTU approved research guides. Highly qualified faculty members with extensive experience is the main strength of the department. The B.Tech program aims to equip students with a global perspective on Civil Engineering, emphasizing sustainable development. Graduates will solve engineering challenges while adhering to professional ethics and responsibilities. The M. Tech program emphasizes advanced knowledge in Structural Engineering and Construction Management, encouraging research-based projects and preparing students for teaching and research, meeting industry demands. Both programs focus on industry-related projects and addon courses, ensuring holistic skill development. The department also offers consultancy services in Material Testing and Design.

Vision

Emerge as a Center of Excellence in Civil Engineering, fostering globally competent and socially committed Civil Engineers.

Mission

- MI: To provide a comprehensive education and training at the levels of materials, tools, planning, analysis, design and maintenance of structures.
- M2: To encourage research and development in the field of civil engineering that are useful for the society.
- M3: To equip the graduate with strong ethical and moral values and make them socially committed.

About the Seminar

Recent advances in 3D printing of buildings have revolutionized the construction industry, offering innovative solutions to address housing shortages and sustainability challenges. One notable development is the use of large-scale 3D printers that can create entire buildings in a matter of days or weeks, significantly reducing construction time and labor costs. These printers utilize a variety of materials, including concrete, to build structures layer by layer with precision. Moreover, cutting-edge technology allows for the customization of architectural designs, enabling architects and engineers to create unique and intricate shapes that were previously difficult or expensive to achieve. Sustainability is also a key focus, with researchers experimenting with eco-friendly materials and incorporating recycling processes into 3D printing to minimize waste. Furthermore, remote construction capabilities are being explored, which could have profound implications for disaster relief efforts and remote infrastructure development. As these advances continue to evolve, 3D printing in construction is poised to reshape the way we build, making it faster, more cost-effective, and environmentally conscious.

