

One Day Seminar

# SMART STRUCTURES: ENERGY-EFFICIENT ECONOMY

J&K 2024

9th October



Energy Efficient buildings under  
construction in Kashmir



Organized By:

**Institute of Technology**

University of Kashmir

**North Campus**

University of Kashmir

**National Institute of Technology**

Srinagar

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## ABOUT



### INSTITUTE OF TECHNOLOGY, UNIVERSITY OF KASHMIR

Established in 2014, the Institute of Technology is the University of Kashmir's prestigious constituent engineering institute. Accredited by the All India Council for Technical Education (AICTE), the Institute of Technology offers a rigorous and recognized academic experience, and provides a stimulating academic environment for undergraduate students seeking a Bachelor of Technology (B.Tech.) degree in core engineering disciplines: Civil, Electrical, Electronics & Communication and Mechanical Engineering. Further, the Institute offers M. Tech in Power system and Control, Design Engineering, and Electronics and Communication and a four year innovative undergraduate program via Design Your degree (DYD) mode



### NORTH CAMPUS, UNIVERSITY OF KASHMIR

The University of Kashmir's North Campus was formally operational in 2009 at Upper Dellina, Baramulla. North Campus provides a vibrant academic environment for BTech and MTech in Computer Science Engineering, Masters in Computer Applications, a five-year Integrated Master's in Business Administration (IMBA) and Botany, MA in English, and MEd, fuelled by the spark of creativity and innovation.



### NATIONAL INSTITUTE OF TECHNOLOGY SRINAGAR AND DEPARTMENT OF CIVIL ENGINEERING

Established in 1960, the National Institute of Technology (NIT) Srinagar is one of the premier engineering institutes in India, renowned for its excellence in technical education and research. The Civil Engineering Department of NIT Srinagar was also established since the inception of the institute and offers B.Tech. in Civil Engineering and four M.Tech. programs as well as Ph.D. in core Civil Engineering specializations.

Recently, the Department has enhanced its capabilities with the commissioning of a state-of-the-art Shake Table in the newly established Earthquake Engineering Laboratory. This 5-ton payload capacity Shake Table, with 6 DOF, is a unique facility in the northern region. Additionally, the Civil Engineering Department plays a pivotal role in providing major consultancy services to government, semi-government, and private agencies associated with the construction industry.

### INTRODUCTION

We are pleased to announce the One-day Seminar on Smart Structures: Energy-Efficient Economy (SSEE) J&K 2024, scheduled on 9th October 2024. This seminar is a collaborative effort between the Institute of Technology, University of Kashmir, North Campus, University of Kashmir, and National Institute of Technology Srinagar. The primary objective of this seminar is to raise awareness and facilitate the development of affordable and sustainable energy-efficient smart structures in Jammu & Kashmir. The region faces significant energy challenges, with frequent power outages affecting industrial and academic activities, especially during the harsh winter months.

Since J&K lies in high-risk seismic zones (IV & V), it is imperative that smart structures be designed with robust earthquake resistance to mitigate potential devastation.

This seminar will bring together experts, academia and industry professionals to discuss innovative solutions and strategies for building resilient and energy-efficient infrastructures in the region.

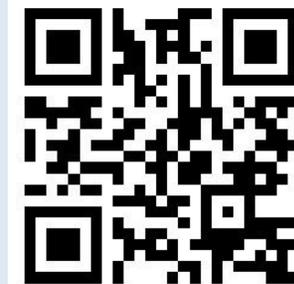
### SEMINAR OBJECTIVES

- Educating participants and all stakeholders about the smart energy-efficient structures.
- Inspiring the widespread adoption and implementation of sustainable practices amongst Architects, Civil, Mechanical & Manufacturing Engineers, and Policymakers

### TOPICS

- Introduction to Smart Energy Efficient Structures
- Introduction & Overview of Earthquake Problem & Solutions in J&K
- Building Codes about Earthquake Resistant Structures
- Current status and future prospectus of solar energy in J&K
- Heating Ventilation and Air Conditioning
- Construction Practices Adopted presently in Kashmir about Smart Energy Efficient Structures.
- 3D Printing of Smart Energy Efficient Structures
- Demonstration of various construction materials used presently in Kashmir.
- Introduction to Cold Formed Steel Structures and its application in Smart and Sustainable Construction
- Fire Resistant Structures
- Panel discussion about the design and implementation of building codes in J&K.

*Scan to Register*



#### Registration Fees

Students: Rs 100  
Faculty: Rs 300  
Industry Participants: Rs 500

AccountNo.  
0007040500001125  
(J&K Bank)  
IFSC Code: JAKA0NASEEM

Last date of Registration:  
8th Oct 2024

*Venue: Ibn Khaldoon Auditorium, Allama Iqbal Library, University of Kashmir.*