

A SEMINAR

on

INFLATABLE STRUCTURES AND MATERIALS FOR SPACE APPLICATIONS (ISMSA -2019) (November 7– 8, 2019)



Organized by

Mechanical & Industrial Engineering
Department (MIED)
Indian Institute of Technology Roorkee
&
Indian Space Industries Exhibitors
Ahmedabad

Supported by

ISRO-IIT R Space Technology Cell
Indian Institute of Technology, Roorkee

Venue

Greater Noida Extension Centre, IIT Roorkee,
Plot No 20, Knowledge Park II,
Greater Noida, Uttar Pradesh 201301

ABOUT THE SEMINAR

In recent years, the demand for large space structures in future space missions has increasingly stimulated the development of inflatable membrane structures owing to their feature of lightweight, high compact ratio, easy to fold and unfold and so on. Its form has received wide attention from researchers and a broad application prospect. Inflatable Structures are being used in the field of Space, Aerospace, Defense, Natural Disasters, engineering & commercial sectors. In future satellites, large-sized and light-weighted payloads will be required for maximum utilization of limited allowable space of launch vehicle. Inflatable structures are attracting the interests of scientists and engineers as a scientific platform in space exploration, over conventional space structures.

The objective of this seminar is to create awareness for advanced Polymer, composite, materials for inflatable structures, their design and manufacturing technologies and specific application areas among the young scientists, academicians, engineers, and industrialists. During the seminar, the invited talks of expert from ISRO and Indian Academics Institutes & Industries will be delivered on the topics related to Inflatable Structure design, Analysis, Manufacturing, Materials, and Testing, etc.

It is expected that the engineers, researchers, scientists, manufacturers & academicians involved in design, development, and production of Inflatable structures, materials and components will be immensely benefited from the deliberations.

TECHNICAL PRESENTATIONS

There will be technical presentations by the experts from academic institutions like IIT Roorkee, IIT Kanpur, and research organizations like ISRO, TIFR, DRDO, NAL and a number of private Industries on the following topics.

- Applications of Inflatable Structures in ground and Space environment.
- Materials for Space and Ground based Inflatable structures
- Qualification for Space environment and tests for Inflatable System
- Folding and Deployment of inflatable Structures
- Rigidization of Membrane-based Inflatable Structures

- Shape Analysis and Control of Inflatable Structures
- NDT and Surface measurements
- Challenges in Fabrication and testing
- Industries in India

EXHIBITION OF INFLATABLE PRODUCTS AND MATERIALS

The vendors and institutions who are interested in exhibiting their products and materials may contact the organizing secretary. The necessary space and facilities would be provided to them on payment basis.

REGISTRATION/EXHIBITION FEE

Registration fee includes boarding and lodging at the campus guest house and seminar fee.

1. Students: 1,500 ₹
2. R&D & Academic Institutions: 4,000 ₹
3. Participants from Industries: 7,000 ₹
4. Exhibition Charges: 20,000 ₹

PAYMENT

The Registration fee should be sent in advance through a bank draft along with the duly filled nomination Performa. The DD should be drawn in favor of "Dean, SRIC, IIT Roorkee", payable at Roorkee with intimation to the Course Coordinator.

Online Payment details

Customer's name: **Dean, SRIC**

Indian Institute of Technology Roorkee

Name & Address of the Bank: **Punjab National Bank, IIT Roorkee**

Digit code number of the bank and branch: **000024000**

RTGS/IFSC Code: **PUNB0404400**

Account number: **4044000100151240**

MICR Code: **247024103**

NOMINATION AND CORRESPONDENCE

The nomination form, duly forwarded by the sponsoring agency, should be sent to:

**Prof. S H Upadhyay,
Associate Professor
MIED, IIT Roorkee**

Email: shumefme@iitr.ac.in, antrixudyog@gmail.com

NOMINATION PROFORMA

Seminar

On

INFLATABLE STRUCTURES AND MATERIALS FOR SPACE APPLICATIONS (ISMSA -2019) (November 7– 8, 2019)

Name & Address of the Candidate

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.....
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Tel. (With STD code) (Off.)..... (Res.).....

FAX :(Mobile).....

E-mail.....

Address of Sponsoring Authority/ self-sponsored:

Tel. (With STD Products) (Off.).....FAX

E-mail.....

1. Draft No. dated is enclosed.

2. RTGS/NEFT details:

Signature of Candidate

Signature of Sponsor With Seal

Note: Please enclose your C.V. without any supporting documents.

IIT ROORKEE

The Indian Institute of Technology Roorkee has an illustrious history and a glorious past. It has its foundation in the Thomson College, which was founded in 1847, to train technical manpower for the construction of Ganga canal. It was the first Engineering College in the British Empire. In the year 1949, this great institution was accorded the status of the first technological university of independent India and was renamed as University of Roorkee. On September 21, 2001, the Government of India declared it as the nation's seventh Indian Institute of Technology. The Department of Mechanical Engineering came into being in the year 1946 and was renamed as Department of Mechanical & Industrial Engineering on its silver jubilee in 1971. At present, it offers undergraduate courses in the area of Mechanical Engineering and Industrial Engineering. The department offers Master of Engineering courses in Machine Design, Production and Industrial Systems, Thermal System, CAD/CAM & Robotics and Welding Engineering. It runs Ph. D. program in all the areas of specialization. IIT Roorkee is situated at the Foothill of the Himalayas, in Hardwar district, in the state of Uttarakhand.

GREATER NOIDA EXTENSION CENTRE

IIT Roorkee has an Extension Centre at Greater Noida (GNEC). Greater Noida is a part of western UP and is well connected to Delhi, NOIDA, and Ghaziabad by road. The nearest airports are Hindon, Ghaziabad and Indira Gandhi International airport, New Delhi. It is about 60 km from New Delhi Railway station. The nearest Railway station is Ghaziabad.

ISIE, AHMEDABAD

The Indian Space Industry Exhibitors (ISIE) have registered office at Ahmedabad and working office at Ghaziabad (UP). The vision of ISIE is to spread the awareness about the Basics of Space and tremendous Applications of Space Science and Technology among the young school and college students along with the common man through exhibitions and seminars. Spreading awareness and educating young persons of the society is part of social activity.

PATRON

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ORGANIZING COMMITTEE

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