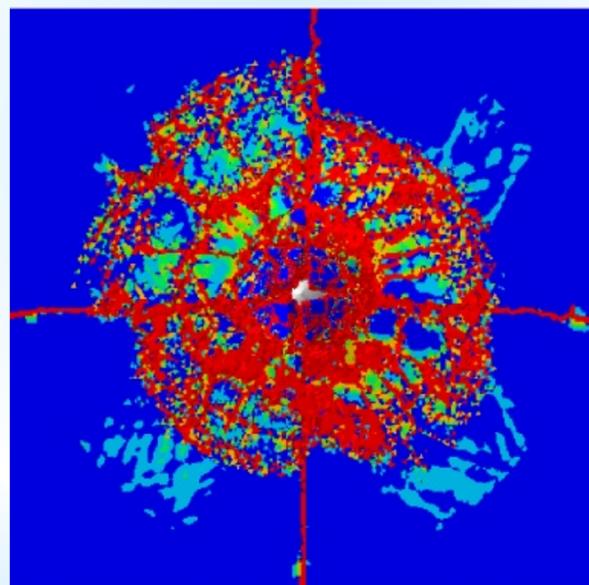


Symposium on
**EXTREME LOADING ON
STRUCTURES-2024**



17 December, 2024



Department of Civil Engineering
Indian Institute of Technology Roorkee
Roorkee-247 667

CHIEF GUEST

Prof. N. K. Gupta, INSA Sr. Scientist
Ph.D., Dr. h.c.(Russ.Acad.Sci.),
FNA, FNAE, FNASc, FIE, FAeSI, Hon.MWIF, Hon.MISIE, FTWAS
(Recipient of Padmashri)

SPEAKERS

Prof. Sergey Kuznetsov, Russian Academy of Sciences
Prof. Vladimir A. Bratov, Edinburgh Napier University
Prof. Puneet Mahajan, IIT Delhi
Prof. Venkit Narayanan, IIT Kanpur
Prof. Anindya Deb, IISc. Bangalore
Dr. R. K. Singh^(Retd.), BARC
Dr. Umesh Kumar Sharma, IIT Roorkee
Prof. Pankaj Aggarwal, IIT Roorkee
Dr. Sourav Acharya, AERB, Mumbai
Dr. Moloy Chakraborty, AERB, Mumbai
Dr. Vikas Kumar, DMRL Hyderabad
Dr. Akhilesh Sharma, TBRL Chandigarh

*Above list of speakers is tentative & request has been sent for their kind consent. Efforts are being made to include more speakers.

REGISTRATION FEE

- Registration Fee : Rs. 3540/-
- Student delegates : Rs. 1770/-
- Following are the details for the payment of the registration fee :

Name of The Bank : STATE BANK OF INDIA
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SPONSORSHIP

Rs. 1,00,000/- (Sponsored free delegates: 4)
Rs. 75,000/- (Sponsored free delegates: 3)
Rs. 50,000/- (Sponsored free delegates: 2)
Rs. 25,000/- (Sponsored free delegates: 1)

PREFACE

The loadings at high strain rates and high temperatures causing large nonlinear deformations of materials and structures are considered extreme. These conditions originating from natural disaster, human error or strategic action possess strong potential to jeopardize the infrastructural, ecological and economical systems.

The complex deformation and failure mechanisms arising due to extreme loading situations though investigated rigorously have not been understood adequately. The design procedures for these events are based on certain assumptions leaving voids of uncertainty and high probability of failure.

The symposium will elaborate upon various aspects pertinent to deal with different extreme scenarios such as ballistics, blast, fire, explosion, crash, earthquake, tsunami and cyclone. The associated issues with respect to the experimental, analytical, computational and constitutive modelling will also be deliberated.

In addition to providing a platform to scientists from academia, industries and research laboratories for sharing the latest developments in the studies of extreme loading situations and their aftereffects, the symposium will be instrumental in building and strengthening lasting relationships between the participants.

ORGANIZED BY

- Department of Civil Engineering
Indian Institute of Technology Roorkee

TOPICS

The following topics will be covered during the symposium. The list is indicative and not exhaustive.

- Ballistic Impact
- Earthquake, Tsunami and Cyclone
- Fire and Blast Loading
- Large Deformation Problems
- Constitutive Behaviour
- Crash and Collisions
- Structural Stability and Reliability

ACCOMMODATION

On-campus accommodation is available on sharing basis.

CONTACT

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