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14th International Symposium on Plasticity and Impact Mechanics

IMPLAST 2025

October 12 - 16, 2025

International Scientific Committee

Chairman Guoxing Lu, Australia

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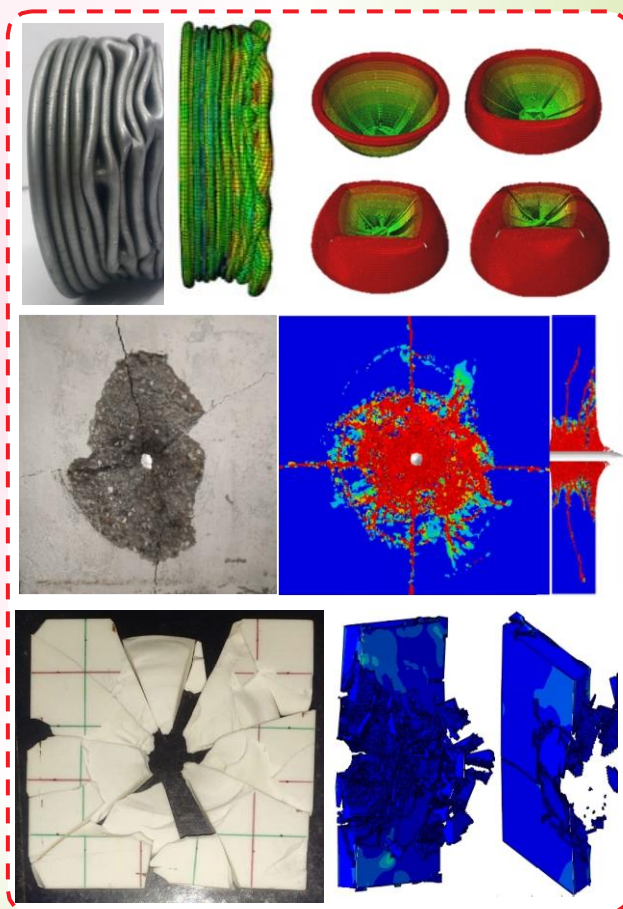
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Message from the Conference Chairman

On behalf of the Organizing Committee, it is my pleasure to cordially invite you to participate in IMPLAST 2025, the 14th International Symposium on Plasticity and Impact Mechanics, being held at Indian Institute of Technology Roorkee. IIT Roorkee, established as Thomason College of Civil Engineering in 1854, is the oldest engineering Institution of India.

IMPLAST series was initiated by Prof. N. K. Gupta in 1973. With the gap of three years, by now, nine of these symposia have been held in India and four, the 7th, 9th, 10th and 12th Symposia, were held in Melbourne in 2000, Bochum in 2007, Rhode Island in 2010 and Busan in 2019.

The international scientific committee is being chaired by Prof. Guoxing Lu (Swinburne University, Australia) in the current symposium while during the last three symposia the committee was chaired by Prof. Norman Jones (The University of Liverpool, U.K.).

The symposium welcomes the latest research findings from across the globe on fundamental and applied aspects of large deformation and failure of structures resulting from quasi-static, dynamic, earthquake, impact or blast loading. The aim of this symposium is to foster fruitful interactions between scientists from academia, industries and research laboratories for sharing the latest developments in plasticity and impact mechanics. In addition to providing platform to scientists for sharing their knowledge, these symposia have proven instrumental in building and strengthening lasting relationships between the participants from across the globe.

Papers presented in the symposium will be published in the Scopus indexed journals. Suitably revised and expanded papers will be published in the special issues of reputed international journals after their regular review process.

Roorkee, a small and naturally beautiful town situated in the foothills of Himalayas is closely connected to important places like Haridwar, Rishikesh and Mussoorie. Weather in Roorkee during the month of October is especially pleasant. The organizing committee will arrange for the sightseeing and the cultural events.

We look forward to welcoming you in Roorkee for attending the Symposium, and for the joy of meeting old friends and making new ones.

Topics

The acronym IMPLAST implies a convergence of the words Impact and Plasticity and papers dealing with any aspect of the behaviour of materials (including metals, composites, cellular, geomaterials or concrete) and structures subjected to quasi-static, earthquake, fire, impact and blast loading are welcome.

The following topics will be covered in IMPLAST 2025. The list is indicative and not exhaustive.

- ◆ Constitutive Relations
- ◆ Theories of Plasticity
- ◆ Behaviour of Materials at High Strain Rates
- ◆ Application of Theories to Structural and Manufacturing Problems
- ◆ Structural Crashworthiness and Failure
- ◆ Stress Waves in Solids
- ◆ Mechanics of Penetration and Perforation
- ◆ Fire and Blast Loading
- ◆ Earthquake Loading
- ◆ High Speed Impact Problems

Key Dates

- ◆ Submission of Abstracts : February 28th, 2025
- ◆ Submission of Manuscripts : April 30, 2025
- ◆ Payment of **Registration Fee** : June 30, 2025

Registration Fee

- ◆ Foreign delegates : US \$ 400
- ◆ Indian delegates : Rs. 15,000
- ◆ Student delegates : Rs. 10,000
- ◆ Mode of Payment may please be seen on the symposium website.

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Adviser : Praveen Kumar, HOD
Co-Chairmen : N.K. Samadhiya, R. Velmurugan
Founding Chairman : N. K. Gupta
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