



The Fifth International Conference on Damage Mechanics (ICDM5)

Date: 16th - 18th July 2025

Venue: National University of Singapore

Mini Symposium Title	Novel Algorithms, Strategies and Studies for Computational Modeling of Impact Damage
Short description on the focus of the Mini Symposium	<p>Impact damage studies are crucial for designing materials and structures that can endure extreme loading conditions encountered in ballistic, blast, and crash scenarios. The increasing computational power coupled with rise of machine learning has opened new avenues for simulation of these class of problems. The aim of the mini symposium is to provide a platform for discussing recent advances in impact damage using novel algorithms, machine learning methods. Of particular interest are</p> <ul style="list-style-type: none"> • Computational modelling and development of models for high-velocity impact, penetration phenomena and material fragmentation. • Machine learning, data-driven methods and AI-driven approaches for impact damage. • Applications in automotive, aerospace, defence, industrial sectors, etc.
Organizers	<p>Dr. Rahul Dubey, Indian Institute of Technology Guwahati, INDIA Dr. Manoj Kumar, National Institute of Technology Jalandhar, INDIA Dr. Sachin Singh Gautam, Indian Institute of Technology Guwahati, INDIA</p>