

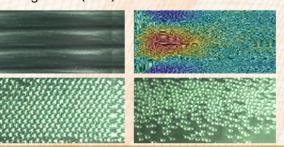
# The 10th International Conference on the Micromechanics of Granular Media

Date: 8-12 December 2025 Venue: Goa, India

The aim of Powders & Grains 2025 is to share the recent advances in the broad research field of granular media and particulate suspensions. Contributions from experts around the world will cover a wide range of topics

Powders & Grains (www.powdersandgrains.org) is the premier international scientific conference held every four years in three different continents (Europe, America and Asia & Oceania) since 1989. it brings together engineers, physicists and applied mathematicians interested in the mechanics and physics of granular media and particulate suspensions. It distinguishes itself from other meetings on granular materials by (1) the mixture of disciplines, (2) the unique single-session talks, (3) the posters taking a prominent role and being displayed throughout the conference, and (4) the refereed conference papers published online before the meeting.

The past P&G conferences were held at (1) Clermont-Ferrand - France (1989), (2) Birmingham - England (1993), (3) Durham - USA (1997), (4) Sendai - Japan (2001), (5) Stuttgart - Germany (2005), (6) Golden - USA (2009), (7) Sydney - Australia (2013), (8) Montpellier - France (2017) and (9) Buenos Aires- Argentina (2021).



## **CONFERENCE TOPICS & THEMES**

Powders & Grains 2025 will cover a range of oral talks and posters addressing both fundamental and applied scientific problems in granular media and suspensions, including:

- Rheology and constitutive modelling of granular media
- Kinetic theory of granular materials: granular gas, gas-solid suspension with cohesive & charged particles
- Jamming, rigidity and shear-thickening transitions
- Polydispersity, segregation, and pattern formation
   Geophysical (sand dune, avalanche, ..), environmental
   (dust storm, aerosols,..) and planetary (accretion disk, impact cratering) granular processes
- Geomaterials (soil, rock, concrete & minerals)
- Powder processing in pharmaceuticals and food science
- Particulate multiphase flows (fluidization, sediment transport, ..) and porous media
- Particle-based numerical methods (DEM, MD, DSMC, MPM, Fast Spectral with AI / ML Technique)
- Experimental methods for granular mechanics
- Emerging topics: Additive manufacturing & metamaterials,
- Microgravity, tribo-charging and active particles
- Any other topics.

# INVITED SPEAKERS

Bulbul Chakraborty, Brandeis University, USA
"Emergent Elasticity of Jammed Solids: A Stress-Only Framework"
Benjy Marks, University of Sydney, Australia
"Heterarchical Granular Dynamics"

**Catherine O'Sullivan,** Imperial College London, England "Coupled phenomena in soil: Insights from particle-scale simulations"

**Daniel Goldman,** Georgia Institute of Technology, USA "Locomotion on and within granular media"

**Devang Khakhar,** Indian Institute of Technology Bombay, India "Computational and experimental analysis of granular flow in hoppers"

Farhang Radjai, University of Montpellier, France
"Stress transmission and fabric states in granular materials"
Ishan Sharma, Indian Institute of Technology Kanpur, India
"Regolith dynamics on small bodies in the Solar System"
Joshua Dijksman, University of Amsterdam, Netherlands
"Lubrication in dense particle extrusion dynamics"
Ryohei Seto, University of Chinese Academy of Sciences, China
"Microstructure Evolution Model of Dense Suspension Flows"

## CALL FOR PAPERS

The official language of the conference is English. The participants are required to submit abstracts through the conference website "www.Powdersandgrains2025.co.in". The abstract submission process begins from August 15th, 2024.

Authors of accepted abstracts will be invited to submit full papers from 1st January 2025 to 31st March 2025.

The conference proceedings will be published as ISI referenced online papers before the start of the conference. To follow conference news and updates, please subscribe to the mailing list of the conference at the following address:

www.powdersandgrains.org

### IMPORTANT DATES

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Abstract submission:	15th Aug - 30th Nov 2024
Notification of Acceptance of Abstract:	15th December 2024
Deadline for Full Paper Submission:	30th March 2025
Reviewers' Reports Available:	30th May 2025
Paper re-Submission for online Publication:	15th July 2025
Notification of acceptance of papers:	1st August 2025
Decision on Oral/Poster presentation	15th August 2025

# REGISTRATION

١	Very Early Registration :	1st May - 30th June 2025
١	Early Registration:	1st July - 31st August 2025
1	Late Registration:	1st Sep - 30th Nov 2025
	Onsite Registration:	After 1st December 2025

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### CONTACTS

Conference Secretariat Prof. Meheboob Alam Organizing Chairperson Chair of the Organizing Committee **Engineering Mechanics Unit** Jawaharlal Nehru Centre for Advanced Scientific Research Jakkur PO, Bengaluru, Karnataka 560064 Email: powdersandgrains2025@gmail.com

### **ORGANISATIONS & PARTNERS**



Jawaharlal Nehru Centre for Advanced Scientific Research, Bengaluru

### VENUE-GOA

Goa, India's smallest state, is located on its west coast, about 400 KM south of Mumbai. Goa's beautiful beaches. ancient churches, historic forts, fresh seafood, and active nightlife make it one of India's most visited states. It is bounded by the Arabian Sea on the west and by the states of Maharashtra on the north and Karnataka on the east and south. The capital is Panaji (Panjim), on the north-centra coast of the mainland district.



