# 3rd World Congress on AIM
# ARTIFICIAL INTELLIGENCE IN MATERIALS & MANUFACTURING 2025

## CALL FOR ABSTRACTS

**EXTENDED SUBMISSION DEADLINE:**
**DECEMBER 13, 2024**

The 3rd World Congress on Artificial Intelligence in Materials and Manufacturing (AIM 2025) marks a significant milestone in advancing the role of artificial intelligence (AI) within materials science, engineering, and manufacturing. AIM 2025 gathers stakeholders from academia, industry, and government to delve into the integration of AI in research and manufacturing. The congress aims to address critical issues and chart future pathways for AI implementation, fostering collaboration and innovation in the field of materials science and engineering.

AIM 2025 will include the following specific technical topics:

- AI for Workforce Development and Education
- Applied ML for Manufacturing (Additive, Architected Materials, Ceramics, Batteries, and Energy Storage)
- Autonomous Self-Driving Laboratories
- Development of Novel ML Methodologies: Physics-Informed ML, Scientific ML, Graph-based ML
- Digital Twins for Manufacturing
- Fair Data for Materials and Manufacturing
- Optimization of Manufacturing Processes
- Large Language Models for Materials and Manufacturing

Congress participants are encouraged to submit their work to the TMS journal *Integrating Materials and Manufacturing Innovation*, which will be publishing a topical collection dedicated to this event. This collection will take the place of a traditional conference proceedings publication. Only submissions from participants will be considered for this collection. Submissions will go through the journal's standard peer review process, and there is no guarantee of acceptance.The journal submission deadline is August 31, 2025.

**Submit your abstract at**
**www.tms.org/AIM2025**

TMS SPECIALTY CONGRESS 2025

**JUNE 15-19, 2025**
**Anaheim Marriott**
**Anaheim, California, USA**

**CO-LOCATED WITH:**

ICME MANUFACTURING DESIGN MATERIALS

8TH WORLD CONGRESS ON
**INTEGRATED COMPUTATIONAL MATERIALS ENGINEERING (ICME 2025)**

The 7th International Congress on
3DMS
3D Materials Science 2025

## ORGANIZERS

**LEAD ORGANIZER:**

- **Rémi Dingreville**, Sandia National Laboratories

**PROGRAMMING CHAIR:**

- **Ali Riza Durmaz**, Fraunhofer-Institut für Werkstoffmechanik IWM

**ORGANIZING COMMITTEE:**

- **Youngsoo Choi**, Lawrence Livermore National Laboratory
- **Dennis Kochmann**, ETH Switzerland
- **Graeme O'Dowd**, Jaguar Land Rover (JLR)
- **Brian Storey**, Toyota Research Institute

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