

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

CALL FOR ABSTRACTS EXTENDED SUBMISSION DEADLINE: DECEMBER 13, 2024

The 8th World Congress on Integrated Computational Materials Engineering (ICME 2025) serves as a pivotal platform uniting leading researchers, practitioners, and stakeholders to exchange cutting-edge knowledge and advancements in the discipline. As the primary nexus for interaction among software developers, process engineers, materials scientists, and engineers across the production chain, ICME 2025 addresses integration priorities and identifies gaps crucial for advancing the field. This unique congress facilitates collaboration among diverse stakeholders from various nations, disciplines, and organizations, fostering dialogue on recent breakthroughs and strategies to tackle challenges. ICME 2025 offers invaluable insights and networking opportunities for researchers, software developers, metallurgists, process engineers, and other professionals involved in R&D efforts.

ICME 2025 will include the following specific technical topics:

- Artificial Intelligence and Machine Learning in ICME
- Digital Thread/Twins in ICME
- High Performance Computing in ICME
- ICME Application to Advanced Manufacturing Methods (Additive, Metamorphic, Hybrid, etc.)
- ICME for Materials Design and/or Modification (Co-Optimization/Co-Design)
- ICME for Supply Chain and Recycling Applications
- ICME for Non-Metals and Composites: Structural and Functional Applications
- ICME in Education and Workforce Development
- ICME Processing Microstructure Properties –Linkages; Across Length and Time Scales
- Industrial Case Studies, Success Stories, and ICME-based Design Tools
- Scientific Workflows for ICME High Throughput Experiments, Data Collection & Storage, and Real-Time Autonomous Processes
- Verification, Validation, and Uncertainty Quantification

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/ICME2025



TMSSPECIALTY

CONGRESS 2025

ORGANIZERS

LEAD ORGANIZER:

• Victoria Miller, University of Florida

PROGRAMMING CHAIR:

Stephen DeWitt, Oak Ridge National Laboratory

ORGANIZING COMMITTEE:

- Adamantia Lazou, National Technical University of Athens
- Beena Rai, Tata Consultancy Services
- James Saal, Citrine Informatics
- Wenwu Xu, San Diego State University
- Mohsen Asle Zaeem, Colorado School of Mines

