

Symposium on **DIGITAL & ROBOTIC FORMING 2024**

**TMS SPECIALTY
CONGRESS 2024**

JUNE 16-20, 2024
Cleveland Hilton
Cleveland, Ohio, USA

REGISTER NOW

The Symposium on Digital and Robotic Forming 2024, a brand new TMS event, will explore science and technology associated with numerically controlled forming methodologies that include robotics, machine learning (ML), and/or combinations of manufacturing practices and how they can be applied to forming techniques, processing science, and the way we manufacture and make materials. This symposium will convene experts and stakeholders to discuss the supply chain challenges for large metal parts and more. Attendees will investigate how the forging industry, that has not seen many fundamental changes in the last 50 years, is poised for transformation, with advanced sensors, design methods, and machine learning.

The Symposium on Digital and Robotic Forming 2024 will include the following specific technical topics:

- Artificial Intelligence (AI)/ML in Robotic Forming
- Fundamentals of Incremental Forming
- Hybrid Processes (e.g., Stamping & Robotic Forming, Robotic Forming & Stretch Forming)
- ICME in Support of Forming Operations
- ICME-Based Design in Robotics
- In-situ, In-operando, and Post-mortem Characterization (Temperature, Strain, Microstructure)
- Industry Application on Infrastructure (Includes: Marine, Defense, Automotive, Aerospace, Medical, Large-Scale Energy, Construction, Architecture)
- Methods for 3D/4D Processes
- Robotics: Enabling and Application
- Robotic Forming on Non-Metals
- Tools: Computational and Control

Symposium 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 the symposium. This collection will take the place of a traditional conference proceedings publication. Only submissions from attendees 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, 2024.

ORGANIZERS

LEAD ORGANIZER:

- **Glenn Daehn,**
The Ohio State University

ORGANIZING COMMITTEE:

- **Jian Cao,**
Northwestern University
- **Kester Clarke,**
Colorado School of Mines
- **Babak Raeisinia,**
Machina Labs
- **Iain Todd,**
University of Sheffield
- **Sarah Wolff,**
The Ohio State University

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The Minerals, Metals & Materials Society

Learn more and register at www.tms.org/RoboticForming2024