

THE WORLD COMES HERE.  
**TMS2024**  
153<sup>rd</sup> Annual Meeting & Exhibition

MARCH 3–7, 2024  
HYATT REGENCY ORLANDO  
ORLANDO, FLORIDA, USA  
#TMSAnnualMeeting



**SUBMIT AN ABSTRACT FOR THE FOLLOWING TMS2024 SYMPOSIUM:**

**MATERIALS SYNTHESIS AND PROCESSING**

**Materials Processing and Kinetic Phenomena: From Thin Films and Micro/Nano Systems to Advanced Manufacturing**

Materials processing plays a key role in a wide variety of critical and emerging technologies, including thin film processing, micro/nano manufacturing, quantum technologies, and additive manufacturing. To go beyond empirical process development and recipe optimization, a critical and in-depth understanding of the processing science and underlying kinetic phenomena is instrumental.

This symposium aims to bring together a wealth of researchers and leaders to discuss how materials processing science has been and is being applied to address the pressing needs in thin film processing and micro/nano manufacturing. It also aims to provide a platform to discuss how processing science and kinetics can best benefit emerging fields, such as additive manufacturing.

Topics of interests include:

- kinetic phenomena at the micro/nanoscale: e.g., dewetting and pattern formation
- thin film processing: stress/microstructure/phase evolution
- processing science and kinetic phenomena underlying advanced manufacturing
- Integration of AI and data-driven approaches with materials processing science.

**ORGANIZERS**

**Hang Yu**, Virginia Polytechnic Institute State University, USA

**Steven Boles**, Norwegian University of Science and Technology, Norway

**Jihun Oh**, Korea Advanced Institute of Science & Technology, Korea, South

**Jerrold Floro**, University of Virginia, USA

**Zungsun Choi**, Infineum Singapore LLP, Singapore

**Matteo Seita**, University of Cambridge, United Kingdom

**Changquan Lai**, Nanyang Technological University, Singapore

**SYMPOSIUM SPONSORS**

TMS Functional Materials Division

TMS Materials Processing & Manufacturing Division

TMS Thin Films and Interfaces Committee

TMS Phase Transformations Committee