

— **Call for Papers** —  
A Symposium on  
**Advances in Lightweight and Dissimilar Materials Joining**

Sponsored by the ASME Manufacturing Engineering Division's  
*Manufacturing Processes Technical Committee*  
2020 ASME International Manufacturing Science and Engineering Conference (MSEC)\*  
June 22 – 26, 2020  
Cincinnati, Ohio  
Hosted by the University of Cincinnati, College of Engineering and Applied Science

### Technical Focus

Joining is an essential element in manufacturing complex structures and products - from custom products such as aircrafts, ships and medical devices to high volume products such as automobiles, appliances and microelectronics devices. Current trends in product design saw increased usage of lightweight and dissimilar materials, including different types of metals and composite materials. We are hence inviting researchers from academia, industry and government to share the advances and innovations in the field of joining of lightweight and dissimilar materials. The symposium consists of paper presentations. Specific topics of interest include, but are not limited to:

- Novel solid state joining technologies, such as friction welding, friction stir welding, ultrasonic welding, wire-bonding, and impact welding;
- Novel mechanical joining methods such as self-piercing riveting, flow drill screwing, and friction stir riveting;
- Novel soldering, brazing, and fusion welding technologies, such as remote laser welding;
- Joining process modeling & characterization, including advanced computational models such as multi-scale and multi-phase models;
- On-line joining process monitoring and control, and off-line nondestructive evaluations.

### Paper Submission

Authors are encouraged to submit an abstract and full manuscript for review by **November 15, 2019** via the conference website. Final revised manuscripts must be submitted by **March 26, 2020**. The [copyright transfer form](#) must be filled out by March 19, 2020 and the presenting author must [pre-register](#) by **April 15, 2020** or the paper will be withdrawn from the conference. **No papers are to be submitted to the organizers; submissions will only be accepted via the conference website at <https://event.asme.org/MSEC/>.**

All papers accepted by MSEC2020 can be further submitted to any ASME journals, such as the highly prestigious **Journal of Manufacturing Science and Engineering**, for consideration of archival publication. In addition, high quality MSEC2020 papers will be automatically channeled to relevant ASME journals for fast-tracked publications.

### Organizers:

Dr. Yongbing Li, Shanghai Jiao Tong University, Shanghai, China, phone: (86)(21)34206305, email: [yongbinglee@sjtu.edu.cn](mailto:yongbinglee@sjtu.edu.cn)  
Dr. Xun Liu, The Ohio State University, Columbus, OH, USA, phone: (734)7306779, email: [liu.7054@osu.edu](mailto:liu.7054@osu.edu)  
Dr. Wayne Cai, General Motors Global R&D Center, Warren, MI, USA, phone: (248) 807-3949, email: [wayne.cai@gm.com](mailto:wayne.cai@gm.com)

---

\* The conference is collocated with NAMRI/SME's 48th North American Manufacturing Research Conference (NAMRC48) and LEM&P (Leading Edge Manufacturing / Materials and Processing) by The Japan Society of Mechanical Engineers (JSME), which will have a separate call-for-papers. Please note that submissions of the same paper to more than one conferences are not permitted.