

— **Call for Papers** —
A Symposium on
Novel Joining Technologies for Dissimilar Materials

Sponsored by the ASME Manufacturing Engineering Division's
Manufacturing Processes Technical Committee
2019 ASME International Manufacturing Science and Engineering Conference (MSEC)*
June 10-14, 2019
Erie, Pennsylvania
Hosted by Pennsylvania State University, The Behrend College

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 dissimilar materials, including different types of metals and composite materials. We are hence inviting researchers from academia, government and industry to share the advances and innovations in the field of joining of dissimilar materials. The symposium consists of paper presentations. Specific topics of interest include, but are not limited to:

- Novel solid state joining technologies that are most suitable for dissimilar materials, 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 special fusion welding technologies adapted to dissimilar materials joining;
- Dissimilar material 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 02, 2018** via the conference website. Final revised manuscripts must be submitted by **March 15, 2019**. The [copyright transfer form](#) must be filled out **March 8, 2019** and the presenting author must [pre-register](#) by **April 05, 2019** or the paper will be withdrawn from the conference. Authors may also consult www.asme.org/divisions/med/call/ for updates. **No papers are to be submitted to the organizers; submissions will only be accepted via the conference website at www.asmeconferences.org/msec2019/.**

Additional Symposium Activities

To highlight advancements in this technical area, symposium organizers will:

- work to attract a high profile international keynote speaker including honorarium
- organize a special issue in the ASME J. of Manufacturing Science and Engineering or ASME J. of Micro and Nano-Manufacturing
- organize a state-of-the-art paper that will be the lead article in the special issue

Organizers:

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* The conference is collocated with NAMRI/SME's 47th North American Manufacturing Research Conference (NAMRC47), which will have a separate call-for-papers. Please note that submissions of the same paper to more than one conference are not permitted.