

— **Call for Papers** —
A Symposium on
Innovations in Equipment Design, Control and Automation

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

Technical Focus

Advances in manufacturing technologies have to be aided by innovations in manufacturing equipment, tooling, and control/automation for effective deployment and commercialization. Most often, innovations in equipment/tooling design or control/automation are inspired by the requirements of a new manufacturing technology or the need to improve existing manufacturing processes. This symposium focuses on such demonstrated innovations in the design and control of equipment or components that enable new or improve existing manufacturing technologies. Specific topics of interest include, but are not limited to:

- Hybrid machine systems (e.g., system combining additive and subtractive manufacturing)
- Design and control of high precision motion systems (e.g. used in lithography, deposition, micro-machining)
- Advances in sensors, actuators, motion command algorithms for positioning systems
- Novel multi-axis machine structures and controllers (e.g., serial kinematics, parallel kinematics, hybrid configurations, coarse-fine stages)
- Sensor-assisted manufacturing (e.g., sensor assisted 3D printing or machining)
- High speed and precision spindles
- Nozzles for additive manufacturing (e.g., ink jet, electrospinning, FDM)
- Novel tool holders and tool path planning (e.g., in machining)
- Tool design (e.g., in forming)

Papers must demonstrate the testing of the new design or control methods to improve a manufacturing process. Contributions from the industry in this area are particularly encouraged.

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 07, 2019**. The [copyright transfer form](#) must be filled out and the presenting author must [pre-register](#) by **April 05, 2019** or the paper will be withdrawn from the conference.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/.**

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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.