

— Call for Papers —

A Symposium on

Advances in Assisted and Augmented Manufacturing Processes

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

Pennsylvania State University, The Behrend College

Technical Focus

Manufacturing of materials can be a challenging task, particularly due to the targets of cost and time minimization at maximum quality. When manufacturing process parameters cannot be compromised further due to process constraints to achieve required targets, auxiliary systems can provide significant aid in improving results. These auxiliary systems can be merely assisting the process to overcome capability restrictions in the short term, or augmenting the process to create new solutions in the long term. In many cases, a single manufacturing process cannot fulfill all the requirements of product performance, due to the limitation of that individual process. Combining two processes sequentially or simultaneously can overcome the difficulty of a single process by leveraging each other's strengths. This symposium will focus on the advances on assisted or augmented processes, as well as sequential and hybrid manufacturing processes for further improvement and optimization of manufacturing processes. Papers from both academia and industry are strongly encouraged. **More specifically, this symposium is focused on applications where traditional manufacturing process performance is extended or improved through the addition of complimentary processes.** Topics of interest include, but are not limited to:

- Electrically-Assisted Manufacturing Processes
- Thermally-Assisted Manufacturing Processes
- Magnetic Field-Assisted Manufacturing Processes
- Laser-Assisted Manufacturing Processes
- Ultrasonically-Assisted Manufacturing Processes
- Assisted Manufacturing Process Monitoring and Control
- Industrial Applications of Assisted Manufacturing Processes
- Related Manufacturing Innovations for Medical Devices and Healthcare Products

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transfer form must be filled out and the presenting author must pre-register by **April 05, 2019** or the paper will be withdrawn from the conference.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: <http://www.asmeconferences.org/msec2019/>.**

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 submission of the same paper to more than one conference is not permitted.