

— 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

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

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 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 15, 2020 and the presenting author must pre-register by **April 15, 2020** 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: <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

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* The conference is collocated with NAMRI/SME's 48th North American Manufacturing Research Conference (NAMRC48), which will have a separate call-for-papers. Please note that submission of the same paper to more than one conference is not permitted.