— Call for Papers —

A Symposium on

Advances in Competitive Manufacturing Engineering

Sponsored by the ASME Manufacturing Engineering Division's

Manufacturing Systems Technical Committee

Life Cycle Engineering 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

This symposium is proposed as a publishing venue for high quality research work envisioned to study the complex relationship between business, finance, and manufacturing. Examples of such work includes: the impact of innovative/new manufacturing processes, manufacturing systems, PLM, process and system modelling/simulation, optimization, and their impact on developing or sustaining a competitive edge. Research work that addresses transformations such as lean, agile, leagile, six-sigma, TPM, JIT, TQM, and the like, is of an interest to this symposium. Topics include: Operational excellence, strategic alignment, visual management, and identification of the right operational excellence tools. Cost saving/modelling, metrics, maturity trackers, market drivers/analysis, industrial based case studies intendent to serve the purpose of the symposium are highly desired. Research work on circular economy and its application in design, materials, manufacturing, and related Industrial case studies are encouraged to be submitted to this symposium. Finally, workforce development and new curriculum innovation targeting this area are of a special interest to the organizers. All specific topics of interest include, but are not limited to:

- Impact of Industry 4.0 on sustaining competitive edge.
- Impact of using Modelling and Simulation on achieving better quality/competitiveness.
- Impact of Digital Manufacturing, in-parrticular process and system modelling, PLM on achieving competitive edge.
- Advances in manufacturing system and potential impact on competitiveness.
- · Circular Economy.
- Additive/hybrid/multitasking manufacturing and their impact on developing or sustaining competitive edge.
- · Impact of current advances in operation, enterprise, and supply chain management.
- · Market drivers/ analysis from manufacturing perspective.
- · Issues in collaborative manufacturing.
- Workforce development and transformation tools.
- Technology/Operational Excellence.
- · Industrial case studies to achieve or sustain competitive edge.

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 <u>copyright transfer form</u> must be filled out by March 19, 2020 and the presenting author must <u>pre-register</u> 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.

Additional Symposium Activities

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

- work to attract a high profile industry/academia speaker.
- organize industrial based session on topics related to the symposium.
- organize state-of-the-art paper(s) that will lead to article(s) in the ASME Journal of Manufacturing Science and Engineering.

Organizers:

Dr. Mohamed A. Gadalla, Alabama A&M University, Normal, Alabama, 256-372-5891, mohamed.gadalla@aamu.edu

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Dr. Ahmed Azab, University of Windsor, 313-246-2138, azab@uwindsor.ca

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-forpapers. Please note that submissions of the same paper to more than one conferences are not permitted.