— Call for Papers —

A Symposium on

Sustainable Operations Management in Manufacturing Systems and Processes

Sponsored by the ASME Manufacturing Engineering Division's

Manufacturing Systems Technical Committee

2018 ASME International Manufacturing Science and Engineering Conference (MSEC)*

June 18-22, 2018

Texas A&M University

Technical Focus

Performance variations of a system come from four potential sources, system infrastructures, operations, management, and ergonomics. The system infrastructures include (a) the configuration of the system, such as manufacturing processes, production lines, and supply chains, and (b) the organizational structure, such as marketing, production, and accounting. Operations cover material flows and value flows coming into and going out of manufacturing systems and processes. Management sets up organizational policies, and balances trade-offs between material flows and value flows. Research on ergonomics investigates the interaction between the system/process and human beings. The fundamental research question to sustainable operations management is how to balance trade-offs among performance measures of a system/process along time series by addressing interal and external uncertainties in the system/process.

This symposium focuses on analytical and quantitative approaches to improve system/process performance based on process analyses, numerical modeling/simulation, and empirical modeling. These approaches will have huge impact on operations management in industries, by means of addressing the triple-bottom-line (3BL) in sustainable manufacturing, and integrating 3P of people, profit, and the planet into the culture, strategy and operations of companies. Specific topics of interest are listed below, but not limited to:

- Inventory control
- Optimization for concurrent design in manufacturing and healthcare systems
- Production planning, scheduling, and control
- Production and operations management
- Risk management
- Simulation
- Statistics in process control and performance analysis
- Supply chain management
- Total quality management and control

Paper Submission

Authors are encouraged to submit an abstract and full manuscript for review by **November 15, 2017** via the conference website. Final revised manuscripts must be submitted by **March 31, 2018**. The <u>copyright transfer form</u> must be filled out and the presenting author must <u>pre-register</u> by **April 20, 2018** or the paper will be withdrawn from the conference. Authors may also consult <u>www.asme.org/divisions/med/call/</u> for updates. **No papers are to be submitted to the organizers; submissions will only be accepted via the conference website at <u>www.asmeconferences.org/msec2018/</u>**

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:

Dr. Wei Li, University of Kentucky, KY, USA. Tel.: (859) 257-4842; wei.mike.li@uky.edu

Dr. Kozo Saito, University of Kentucky, KY, USA. Tel.: (859) 257-6336 x80639; ksaito@uky.edu

Mr. Ken Kreafle, Toyota USA/University of Kentucky, KY, USA. Tel.: (859) 257-4851; ken.kreafle@tema.toyota.com

The conference is collocated with NAMRI/SME's 46th North American Manufacturing Research Conference (NAMRC46), which will have a separate call-for-papers. Please note that submissions of the same paper to more than one conferences are not permitted.