

# Journal of Manufacturing Science and Engineering



## **Call for Papers**

## Special Issue on Sustainable Life Cycle Engineering

Jointly sponsored by ASME Design Engineering Division (DED) and Manufacturing Engineering Division (MED)

The ASME Journal of Manufacturing Science and Engineering (JMSE) invites you to submit your research results and findings to a Special Issue on Sustainable Life Cycle Engineering. This special issue accepts submissions on all design and manufacturing-focused principles related to sustainability, including reduction of materials and energy use, substitution of renewables to replace non-renewable materials, reduction in undesirable environmental emissions, waste reduction, design and manufacturing methods for closing the product life cycle loop, re-engineering the structure of manufacturing enterprises, and new business models and paradigms to influence more sustainable manufacturing practices. Research across all product and service system considerations, including new product design, production planning, execution and monitoring, procurement, distribution, maintenance, and end of life, are invited.

Submissions on new design tools, decision making methods, educational approaches, and life cycle modeling and assessment methodologies, targeting sustainability are encouraged. Case studies focusing on quantifiable business outcomes of implemented sustainable solutions that reveal opportunities for overcoming sustainability challenges in design and manufacturing are also encouraged.

As a joint effort between the *Design Engineering Division (DED)* and the *Manufacturing Engineering Division (MED)*, this special issue aims to provide a platform for researchers to disseminate research findings on the role of design decisions and emerging manufacturing approaches towards solving pressing economic, social and environmental challenges of our time. Original research contributions and/or reviews are invited for this Special Issue. **Topics of interest include but are not limited to:** 

- Sustainable Design and Manufacturing Principles
- Business and Social Outcomes of Sustainable Design
- New Life Cycle Modeling Methods and Assessment
- Practices for Effective Sustainable Design and Manufacturing Education
- Methods for Merging Industrial Value Creation towards Sustainability
- Sustainability of Industry 4.0 and IoT-enabled Socio-Technical Systems
- Novel Metrics for Sustainability Explicitly Outlining Metric Construction and Assessment
- Information Sharing Platforms for Sustainability
- Innovative Design of Sustainable Systems
- Case Studies of Sustainable Design and Manufacturing in Practice
- Emerging Computing Technologies and Architectures for Sustainability

Manuscripts are due April 15, 2018 and publication of the Special Issue is scheduled for February 2019.

#### **Submission Guidelines**

Papers should be submitted electronically to the Journal at <a href="http://journaltool.asme.org">http://journaltool.asme.org</a>. If you already have an account, login as author and select Submit Paper at the bottom of the page. If you do not have an account, select Submissions and follow the steps. In either case, at the Paper Submittal page, select the Journal of Manufacturing Science and Engineering and then select the special issue Sustainable Life Cycle Engineering.

#### **Guest Editors**

Dr. Sara Behdad, University at Buffalo, SUNY, USA, <u>sarabehd@buffalo.edu</u>
Dr. William Z. Bernstein, National Institute of Standards and Technology, USA, <u>william.bernstein@nist.gov</u>
Prof. Karl R. Haapala, Oregon State University, USA, <u>karl.haapala@oregonstate.edu</u>