

— **Call for Papers** —  
A Symposium on  
**Intelligent Maintenance Decision Making of Manufacturing Systems**

Sponsored by the ASME Manufacturing Engineering Division's  
*Quality & Reliability Technical Committee*  
2017 ASME International Manufacturing Science and Engineering Conference (MSEC)\*  
June 4-8, 2017  
University of Southern California, Los Angeles, CA, USA

### Technical Focus

With the rapid development of complex and advanced manufacturing machines and equipment in recent years, maintenance strategies have become highly sophisticated. Intelligent maintenance has been considered an effective tool that can help the maintenance decision-makers in a cost-effective manner. It has drawn wide attention and become increasingly important to modern manufacturing systems. Papers are invited to share the theoretical and experimental advances in the development and implementation of advanced methods for diagnosis, performance forecasting, and joint maintenance and production decision-making for manufacturing systems. The goal of this symposium is to present theoretical concepts and practical state-of-the-art approaches to address the problems of early detection, recognition, and prediction of faults in manufacturing systems. With the detection results, the maintenance decision should be made by jointly considering production goal, especially through the cost-effective and energy-efficient way. Papers from both academia and industry are highly welcome. Specific topics of interest include, but are not limited to:

- Sensors and signal processing algorithms.
- Diagnosis/prognosis and preventive maintenance methodologies.
- Embedded systems for condition monitoring.
- Intelligent maintenance for additive manufacturing processes.
- Joint maintenance and quality modeling.
- Joint maintenance and energy control in manufacturing.
- System reliability assessment and health monitoring.
- Maintenance scheduling based on reliability life models and industrial case studies.
- Maintenance module in Manufacturing Execution System (MES).

### Paper Submission

Authors are encouraged to submit an abstract and full manuscript for review by **November 03, 2016** via the conference website. Final revised manuscripts must be submitted by **March 08, 2017**. The copyright transfer form must be filled out and the presenting author must pre-register by April 06, 2017 or the paper will be withdrawn from the conference. Authors may also consult [www.asme.org/divisions/med/call/](http://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 [www.asmeconferences.org/msec2017/](http://www.asmeconferences.org/msec2017/).**

### Organizers

Dr. Zeyi Sun, Missouri University of Science and Technology, Rolla, MO, USA. Ph: (573)-341-7745, [sunze@mst.edu](mailto:sunze@mst.edu)  
Dr. Yong Wang, Binghamton University, Binghamton, NY, USA. Ph: (607) 777-3845, [yongwang@binghamton.edu](mailto:yongwang@binghamton.edu)  
Dr. Ruoyu Li, National Oilwell Varco, Houston, TX, USA. Ph: (713) 868-8789, [ruoyu.li@nov.com](mailto:ruoyu.li@nov.com)

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The conference is collocated with NAMRI/SME's 45th North American Manufacturing Research Conference (NAMRC45) and JSME's International Conference on Materials and Processing (ICMP 2017), both of which have a separate call-for-papers. Please note that submissions of the same paper to more than one conference are not permitted.