— Call for Papers —

A Symposium on

Advances in Nontraditional Manufacturing Processes

Sponsored by the ASME Manufacturing Engineering Division's

Manufacturing Processes Technical Committee

2017 ASME International Manufacturing Science and Engineering Conference (MSEC)*

June 4-8, 2017

University of Southern California

Technical Focus

Nontraditional Manufacturing (NTM) processes provide attractive alternatives for machining complex geometry in the advanced, high-strength and temperature-resistant materials being used in industry today. NTM processes rely on mechanisms other than direct mechanical contact between the cutting tool and workpiece, and their application creates a unique set of technical problems to be solved. This symposium will focus on state-of-the-art research on *macro-, micro-, and nano-*NTM processes and their applications. Research of interest includes: new NTM process development; analytical, mechanistic, and numerical modeling; experimental studies; and process monitoring and control. Specific topics of interest include, but are not limited to:

- Electro discharge/Electrochemical Machining (EDM/ECM)
- Ultrasonic Machining (USM)
- Abrasive/Water Jet Machining(A/WJM)
- Magnetic Field-assisted Machining
- Hybrid Manufacturing (Vibration-assisted EDM, Electrochemical Mechanical Polishing, Electro discharge Grinding)

- Surface Processing (Coating, Texturing)
- Rapid Prototyping/Manufacturing/Tooling
- Environmental and Safety Issues in NTM manufacturing
- Industrial Applications of NTM manufacturing
- Other non-traditional machining methods

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 <u>copyright transfer form</u> must be filled out and the presenting author must <u>pre-register</u> by April 06, 2017 or the paper will be withdrawn from the conference.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/msec2017/.</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. Murali M. Sundaram, University of Cincinnati, Cincinnati, OH, USA, Ph: (513) 556-2791, murali.sundaram@uc.edu
Dr. Zhigang Wang, MAKINO, Mason, OH, USA, Ph: (513) 573-4419, Zhigang.Wang@makino.com

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.