

— Call for Papers —
A Symposium on

Advances in Manufacturing Processes of Biomedical Materials and Products

Sponsored by the ASME Manufacturing Engineering Division's
Biomanufacturing Technical Committee
2014 ASME Manufacturing Science and Engineering Conference (MSEC)*
June 9-13, 2014, Cobo Center, Detroit, MI
Hosted by the University of Michigan

Technical Focus

The characteristics, use and performance of materials, structures and products for biomedical applications entail unique requirements for the processes used to produce them. Constraints and requirements for biomedical manufacturing processes arise from the acceptable types of work materials, the required shapes of implant structures for function and effective deployment and the in-use environment and required performance of products. This symposium is aimed at identifying the constraints imposed on manufacturing processes by the requirements of biomedical materials and products, presenting forefront research results, highlighting needs and solutions for the complex problems that arise in biomedical product production and pointing to new paths for conceiving, designing and operating biomedical manufacturing processes.

Original contributions are invited in, but not limited to the following areas:

- Unique aspects of material removal and deformation processes in biomedical manufacturing
- Advanced manufacturing processes for meso-, micro-, nano-scale structures and devices
- Design and fabrication of surrogates of biological materials for use in process research
- Advanced manufacturing processes for engineered tissue scaffolds and constructs
- Additive and other new processes for biomedical manufacturing
- Advances in process validation and verification in biomedical manufacturing
- Solving problems in the product requirement-manufacturing process capability conflict
- Reviews of the current states of knowledge and technology and of research needs

Paper Submission

Authors are encouraged to submit an abstract and full manuscript for review by **November 03, 2013** via the conference website. Final revised manuscripts must be submitted by **March 09, 2014**. The copyright transfer form must be filled out and the presenting author must pre-register by April 06, 2014 or the paper will be withdrawn from the conference. Authors may also consult 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/msec2014/.*

Organizers

Dr. Yancheng Wang, University of Michigan, Ann Arbor, MI, USA, yancwang@umich.edu, 734-834-7798
Mr. Robert Kohler, Cardiovascular Systems Inc., St Paul, MN, USA, rkohler@csi360.com, 651-259-2064
Prof. Barney Klamecki, University of Minnesota, Minneapolis, MN, USA, klamecki@umn.edu, 612-625-0703

* The conference is collocated with the 42nd North American Manufacturing Research Conference (NAMRC42) of SME and the International Conference on Materials and Processing (ICM&P 2014) of JSME which will have a separate call-for-papers.