

— Call for Papers —
A Symposium on
Innovations in Materials Forming 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

Material forming through plastic deformation is one of the most resource efficient methods in the manufacturing industry. After more than two centuries of industrialization, new technologies are still being developed with a never decreasing rate along with an increasing knowledge of materials behavior, new models, new accurate and efficient numerical techniques. Scientist and engineers of all countries are invited to show their more recent developments and the results of their current R&D projects to a very large, competent and dedicated audience. The focus of the symposium is on the understanding of material deformation processes, both for traditional and lightweight materials and the related modeling capabilities. Papers and presentations about cold, warm & hot processes are welcome. Modeling approaches from micro- to macro-scale will be addressed. Recent R&D advances in forming processes and machines for tubes, profiles, sheets, bulk, porous and composite materials can be promoted at this joint ASME-SME conference, which counts an ever increasing number of participants (several hundreds) from companies, universities and research institutes. Special emphasis is placed on forming of lightweight materials and resource efficiency.

Topics of interests include but are not limited to:

- Advanced control and optimization in tube, sheet and bulk metal forming processes
- New computational methods in forming
- Constitutive modeling
- Fracture and failure prediction
- Microstructure prediction and characterization in forming processes
- Material parameters determination via inverse analysis
- Forming of light-weight materials and structures
- Forming of composite materials
- Energy efficiency in forming
- **Relevant processes include but are not limited to:**
 - deep drawing, stamping and blanking,
 - tube and sheet hydroforming,
 - stretch forming and bending,
 - warm, superplastic and hot forming of sheets,
 - high energy rate forming,
 - hot and cold forging,
 - extrusion and drawing,
 - rolling and roll forming,
 - thermoforming,
 - microforming
 - other novel forming processes and machines

Additional Symposium Activities: The symposium organizers will:

- Work to attract a high profile keynote speaker in the area of materials forming
- Organize a special issue in ASME Journal of Manufacturing Science and Engineering

Paper Submission

Authors are encouraged to submit an abstract and full manuscript for review by **November 03, 2017** 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/ 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/.**

Organizers

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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.