



Call for Papers

Special Issue on Innovations in Materials Forming Processes

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 an ever increasing rate along with an increasing knowledge of materials behavior, computational modeling techniques, and new process for forming both metallic and non-metallic materials. These advances lead to the need for publishing a collection of research papers in the area of materials forming. Researchers in this field are invited to showcase their research to a large audience in a special issue of the *ASME Journal of Manufacturing Science and Engineering*. Papers dealing with experimental and theoretical advances in materials forming, on the micro- and macro- length scales, are welcome. Original research papers on innovative processes for low volume and flexible production are especially encouraged.

Topics of interests include but are not limited to:

- Formability of metals, anisotropic yield functions and constitutive modeling
- New material testing methods and machines
- Innovative materials for forming and blanking tools
- Tribological effects and new lubrication strategies
- Advanced control and optimization in tube, sheet and bulk metal forming processes
- New computational methods in forming
- Fracture and failure prediction
- Microstructure prediction and characterization in forming
- Determination of material parameters via inverse analysis

Relevant processes include but are not limited to:

- Incremental forming processes for metals and polymers
- Warm and hot forming of sheets and tubes,
- Solid state joining of metals and polymers (friction welding and riveting, magnetic pulsed welding, roll bonding, etc.)
- Tube and sheet hydroforming,
- Innovative extrusion and drawing processes
- Microforming processes
- Multi-stage deep drawing and stamping,
- Rolling, roll forming and profile forming,
- Stretch forming and bending,
- High energy rate forming and joining,
- other novel forming processes and machines

Manuscripts are due **November 15th30th, 2015** and publication of the Special Issue is scheduled for **September 2016**.

Submission Guidelines

Papers should be submitted electronically to the Journal at <http://journaltool.asme.org>. 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 **Innovations in Materials Forming Processes**.

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