



NUMIFORM 2019

The 13th International Conference
on Numerical Methods in Industrial Forming Processes

June 23-27, 2019 • Sheraton Portsmouth Harborside Hotel
Portsmouth, New Hampshire, USA • www.tms.org/numiform2019

Don't miss this opportunity to share your work and to connect with other experts in the field.

CALL FOR ABSTRACTS

Submission Deadline:
November 1, 2018

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The Numerical Methods for Industrial Forming Processes (NUMIFORM) series of conferences has grown significantly since launched in 1982, and is now an internationally recognized forum for the exchange of ideas that advance the state-of-the-art in numerical simulations of material forming processes. NUMIFORM 2019 builds upon the success of previous meetings, seeking to convene the field's top thought leaders to discuss recent advances and future directions.

NUMIFORM 2019 is currently seeking abstracts within the following scientific themes:

Material Behavior and Modeling and Its Numerical Implementation

- Multiaxial plasticity; anisotropic yield functions and constitutive modeling
- Microstructure evolution and characterization during material forming
- Physics-based modeling of inelastic deformation phenomena
- Inverse methods for material identification
- Tribology, modeling of contact with friction
- Computational methods for plasticity

Process Modeling and Its Numerical Implementation

- Computational methods in modeling and designing of forming and joining processes
- Recent modeling methods such as meshless, Arbitrary Lagrangian-Eulerian, Smooth-Particle Hydrodynamics, etc.
- Process optimization
- Implementation of numerical schemes on high-performance platforms, e.g., GPUs.

Conventional and Novel Methods of Metal Processing

- Bulk, sheet and tube forming
- Casting
- Welding and friction-stir processing
- Thermomechanical processing and heat-treating
- Powder processing
- Machining
- Forming of lightweighting materials (Ti, Mg, Al, AHSS, composites)
- Microforming
- Field-assisted forming and joining
- Joining of dissimilar materials by plastic deformation
- Additive manufacturing

Polymer and Composite Processing

- Composite forming processes: RTM, wet lay-up, hand lay-up, vacuum bagging, compression molding, filament winding, pultrusion, etc.
- Other composite manufacturing processes
- Reactive liquid molding
- Crystallization
- Injection molding, blow molding, extrusion, etc.

To learn more and to submit your abstract by November 1, 2018,
visit: www.tms.org/numiform2019

