

# — Call for Papers —

A Symposium on

## Advances in Processing of Polymers and Polymer-based Composites

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

Polymer and polymer-based composite processing has rapidly evolved into a multidisciplinary field through technological developments and fundamental understanding in the areas of rheology, heat transfer and material behavior. Innovative contributions in processing from industry and academia have enabled polymers and their composites to widen their reach from products made with traditional processing to many areas of modern technologies. They are widely used in areas such as flexible wearable electronics, nanocomposites, life sciences, membrane and filtration, superabsorbent, energy storage and harvesting, scaffolds, drug delivery vehicles, shape memory materials, high damping materials, and others. Development of mass-production capable manufacturing processes including fiber and textile based processes and other non-traditional processes for polymeric materials is highly demanded.

This symposium will provide a platform for interdisciplinary discussion on recent development in polymer processing and manufacturing. Specific topics include, but are not limited to:

- Liquid molding and casting, thermoplastic/thermoset molding, injection molding, overmolding processes
- Fiber spinning processes, die flow processes, stretching forming processes
- Production and testing of SMART polymers, foams and composites
- Materials removal/ablation processes
- Devices made of polymers/composites
- Precision instrumentation and tooling for injection molding/extrusion/fiber spinning/thermoforming
- Process dynamics and modeling in polymer processing
- Thermo-mechanical properties of recycled polymers/composites
- Polymers for medical applications and devices
- Processing-structure-property relationships in polymers and polymer-based composites

### 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 [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form](#) must be filled out and the presenting author must [pre-register](#) by April 06, 2017 or the paper will be withdrawn from the conference.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/](http://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/](http://www.asmeconferences.org/msec2017/).**

### Additional Symposium Activities

To highlight advancements in this technical area, symposium organizers will:

- work to attract a high profile international keynote speaker in the area of polymer processing,
- organize a state-of-the-art paper that will be the lead article in the special issue.

### Organizers

Dr. Felicia Stan, Dunarea de Jos University of Galati, GL, Romania. Ph: (40) 336-130-210, [felicia.stan@ugal.ro](mailto:felicia.stan@ugal.ro)

Dr. Ramasubramani Kuduva-Raman-Thanumoorthy, 3M Company, Woodbury, MN, USA. Ph: (651) 736-6109, [rkuduvaramanthanumoorthy@mmm.com](mailto:rkuduvaramanthanumoorthy@mmm.com)

Dr. Fabrizio Quadri, University of Rome Tor Vergata, Rome, Italy. Ph: (39) 06-7259-7167, [fabrizio.quadri@uniroma2.it](mailto:fabrizio.quadri@uniroma2.it)

---

\* 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.