MS 1-6: Mechanics of polymers

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The goal of the symposia is to discuss recent advances in characterizing and modeling the mechanical behavior of polymers until failure. Contributions based on experimental, theoretical and numerical approaches leading to a better understanding of the relationship between material process history, induced microstructure and final performance of polymers are encouraged.

Topics of interest include:
- Experimental characterizations for understanding the relationship between polymer microstructures and mechanical properties

- Original experimental methods for, e.g. multiaxial, dynamic, nonlinear, finite strain, sensor aided...characterizations

- Characterization and modeling of polymer fracture

- Constitutive modeling, multiscale modeling and AI modeling for polymers and reinforced polymers

- Optimization of polymer structures

- Behavior and failure of polymers under dynamic or fatigue loading

- Impact of recycling on mechanical properties of polymers

- Impact of the environment on polymer behavior and durability