

Preface

Challenges in Mechanics of Time-Dependent Materials represents one of ten volumes of technical papers presented at the SEM 2016 SEM Annual Conference & Exposition on Experimental and Applied Mechanics organized by the Society for Experimental Mechanics and held in Orlando, FL, June 6–9, 2016. The complete proceedings also includes volumes on *Dynamic Behavior of Materials*; *Advancement of Optical Methods in Experimental Mechanics*; *Experimental and Applied Mechanics*; *Micro-and Nanomechanics*; *Mechanics of Biological Systems and Materials*; *Mechanics of Composite and Multifunctional Materials*; *Fracture, Fatigue, Failure and Damage Evolution*; *Residual Stress, Thermomechanics and Infrared Imaging*, *Hybrid Techniques and Inverse Problems*; and *Joining Technologies for Composites and Dissimilar Materials*.

Each collection presents early findings from experimental and computational investigations on an important area within experimental mechanics, the mechanics of time-dependent materials being one of these areas.

This track was organized to address constitutive, time (or rate)-dependent constitutive, and fracture/failure behavior of a broad range of materials systems, including prominent research in both experimental and applied mechanics. Papers concentrating on both modeling and experimental aspects of time-dependent materials are included.

The track organizers thank the presenters, authors, and session chairs for their participation and contribution to this track. The support and assistance from the SEM staff are also greatly appreciated.

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