Special Issue

Characterisation and Constitutive Modelling of Polymers and Polymeric Composites

Message from the Guest Editor

Polymeric materials are increasingly receiving scientific and industrial interest due to the recent advances in 3D-printing techniques and the possibility of introducing smart responses under various external stimuli. When these materials are manufactured by 3D-printing techniques or when they include embedded stimuli-responsive particles, their mechanical responses become even more complex, presenting anisotropy and physically coupled effects. All these dependences together make the characterization and modelling of their mechanical deformation and failure extremely difficult. In this Special Issue, novel and recent trends in the Characterisation and Constitutive Modelling of Polymers and Polymeric Composites will be highlighted and discussed. A special focus will be placed on smart polymeric composites (e.g., magneto-active, electro-active), 3D-printed polymers, and polymeric metamaterials. This Special Issue will cover experimental, modelling, and computational aspects of the area. It is my pleasure to invite you to submit a manuscript for this Special Issue. Full papers, communications, and reviews are all welcome.

Guest Editor

Dr. Daniel Garcia-Gonzalez
Department of Continuum Mechanics and Structural Analysis, University Carlos III of Madrid, Getafe, Spain

Deadline for manuscript submissions

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MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

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Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian
1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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