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COMPUTATIONAL MECHANICS OF SOFT MATTER AND MACHINES

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ABSTRACT

This symposium aims to expand international cooperation, and promote research efforts in all aspects of the discipline of Computational Mechanics of Soft Matter and Machines. It will feature the frontiers of mathematical modeling, simulation measurement and applications of soft matter and machines, including hydrogels, ionic gels, polymers, dielectric elastomers, shape memory polymer and aerogels, and soft robots (soft machines), all of which fit very well in this symposium. Of special interest are the mechanisms governing the structural, mechanical, chemical, electrical, optical, thermal properties, or a combination of any of these, especially analytical and computational studies on their intrinsic properties and potential applications. In addition, novel environmental stimulation responses in material performance, as well as novel processes for the synthesis of these advanced materials, are covered as well.

All accepted abstracts will be automatically invited to be extended to full papers for publication consideration in one of the following journals:

- International Journal for Computational Materials Science and Engineering (Special Issue);

- International Journal of Applied Mechanics (normal issues, special topics)

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