

Thematic Issue:
Mechanics of Soft Materials and Soft Tissues

H. Jerry Qi
University of Colorado, Boulder, CO 80309, USA

and

Thao (Vicky) Nguyen
Johns Hopkins University, Baltimore, MD 21218, USA

Soft materials are materials that deform easily upon external forces. These include engineering materials, such as rubbers and thermoplastic elastomers, and soft tissues, such as arteries, skin and brain tissues. Understanding the finite deformation multiphysical behaviors of these materials and developing material constitutive models based on knowledge of the underlying material structure and deformation physics are critically important for engineering and biomedical applications.

The papers appearing in this special issue have their origins in the 4th Symposium on Mechanics of Soft Materials and Soft Tissues held at the 2008 Annual Conference of Society of Engineering Science (SES), Urbana-Champaign, IL, October, 2008. The symposium on Mechanics of Soft Materials and Soft Tissues began in 2005 within SES and has seen a significant growth in participation. At the 2008 SES Annual Conference, 29 papers were presented in this symposium, evidencing the increasing interest in the research on soft materials in mechanics community.

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H. Jerry Qi and Thao (Vicky) Nguyen
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