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## WEBINAR SERIES

Presented by

# MRS Bulletin

## Multiscale Mechanics of Biological, Biomedical, and Biologically Inspired Materials

Wednesday, April 22 | 12:00 pm - 1:30 pm (ET)

Mechanical property measurement protocols have their origins in metallurgy—metals being the first materials used on a broad industrial scale—as well as in mechanical and civil engineering. Recent decades have evidenced growing interest in applying these methods to biological materials or materials mimicking or replacing biological tissue. However, the mechanical properties of biological materials are highly variable and hard to determine by the traditional protocols. A more slowly emerging thought is that perhaps the mechanical theories underlying the testing protocols emanating from the metals field might not be fully applicable to highly complex, hierarchically organized biological materials and might need further development. The presentations in this webinar highlight the challenge of extending theoretical and applied mechanics to the level needed to satisfactorily and reliably determine the mechanical properties of biological and related materials.

This Webinar expands on research that is featured in the April 2015 Issue of *MRS Bulletin*.

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## Early Career Scholars in Materials Science Annual Issue

This inaugural Special Issue invites full length research and review articles by materials researchers who have completed their PhD within 8 years of submission, for peer review and publication in the January 2016 issue. The Special Issue provides a unique opportunity to be highlighted and promoted early in one's research career. To increase attention to these papers, this issue will be published on an **open access** basis. Although some papers may have multiple authors, only the Early Career Scholar submitting the paper will be identified with a photo and brief biography when the paper is published. Authors from around the world are invited to submit papers that span the topical coverage of *JMR* including advanced ceramics, metals, polymers, composites, and combinations thereof related to energy, electrical, magnetic, optical, and structural properties and related applications and reporting on:

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**Papers will be accompanied by a photo and short bio of the lead author. These materials must be submitted along with the original submission of the paper.**

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The Society's interdisciplinary approach to the exchange of technical information is qualitatively different from that provided by single-discipline professional societies because it promotes technical exchange across the various fields of science affecting materials development. MRS sponsors two major international annual meetings encompassing many topical symposia, as well as numerous single-topic scientific meetings each year. It recognizes professional and technical excellence, conducts tutorials, and fosters technical exchange in various local geographical regions through Section activities and Student Chapters on university campuses.

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