



Call for Symposium Proposals

Multiscale materials modeling is a well-established branch of computational mechanics, computational biomechanics, and computational materials science, in which existing and emerging methods from interdisciplinary fields are combined in an attempt to bridge phenomena, that are commonly inherent to complex material systems, across different length and time scales. In essence, MMM provides direct insights on how materials and living matter deform and/or adapt their form and function in response to different mechanical, electrical, magnetic, or environmental exciters, by tracing the material response to its structure and molecular/cellular level mechanisms. The Multi-scale Materials Modeling (MMM) conference series was initiated in 2002 to shed light on recent advances in research made by the MMM scientific community and to define future directions.

The 10th Multi-scale Materials Modeling (MMM 10) conference will be held October 18-23, 2020 at the Renaissance Harborplace Hotel, overlooking the famed Baltimore Inner Harbor, in Maryland, U.S.A. The conference will focus on both classical as well as new ground-breaking directions in the field. These include, but not limited to:

- Mathematical and Computational Foundation of Multiscale Methods
- Probabilistic Modeling and Uncertainty Quantification
- Multiscale and Multiphysics Mechanics and Materials
- Material Classes: Biological, Soft Materials, Structural (Crystalline and Amorphous), Nuclear, Multi-functional, Composites, Ceramics, Interfaces, etc.
- Additive Manufacturing and Emerging Manufacturing Methods
- Materials Informatics (machine learning, data mining and artificial intelligence)
- Synergistic Coupling of Experiments with MMM modeling
- Micro and Nanostructural Evolution
- Materials by Design
- Industrial applications

As the organizers of MMM 10, it is our privilege to encourage groups of researchers from academia, national and R&D labs, and/or industry to propose a symposium in one of the conference theme areas.

The symposium proposal should include: 1) a descriptive title; 2) a brief synopsis of the focus of the symposium; 3) proposed organizers (no more than 5) with their affiliations and contact information; and 4) a short list of potential invited speakers. Diversity and international representation for organizers and invited speakers is strongly encouraged.

Proposals should be sent as a single PDF file to mmm2020@jhu.edu by **August 15th, 2019**.

The MMM 10 organizing committee:

Jaafar A. El-Awady, *Johns Hopkins Univ.*

Maria Emelianenko, *George Mason Univ.*

Yuri Mishin, *George Mason Univ.*

Peter Olmsted, *Georgetown Univ.*

Thao D. (Vicky) Nguyen, *Johns Hopkins Univ.*

Somnath Ghosh, *Johns Hopkins Univ.*

Mark Robbins, *Johns Hopkins Univ.*

Peter Chung, *Univ. of Maryland College Park*

Lyle E. Levine, *National Institute Stands. Tech.*