

Dear Colleagues:

The 10th International Conference on Multiscale Materials Modeling (MMM 10), the world's largest theoretical and computational forum on multiscale materials modeling, will be held during October 18-23, 2020 at Renaissance Harborplace Hotel, in Baltimore, Maryland, USA. As a part of this conference, we are organizing a mini-symposium “**Uncertainty Quantification, Sensitivity Analysis, and Machine Learning in Materials Modeling**”, to discuss recent advancements in the use of ML methodology for UQ/SA in materials modeling and to provide a platform for researchers to present, discuss, and exchange the latest development in SA and UQ. In particular, we aim to explore the UQ, SA, and ML associated with:

- The definition, calibration, learning, and sensitivity of interatomic potentials for atomistic simulations;
- Coarse-graining from discrete, lower-scale models to upper-scale continuum models;
- The definition, calibration, learning, and sensitivity of constitutive models for continuum simulations at various length-scales;
- Simulation of composite microstructures for failure analysis, fracture modeling, and material parameter sensitivity
- Model-order reduction associated with scale-bridging;
- Inference of material properties, constitutive relations, and governing equations from limited experimental and/or simulation data.

We cordially invite you to submit your abstract for this mini-symposium. Please note that the deadline for abstract submission is **March. 1st, 2020**. You can submit your abstract using the following link (our session is listed as symposium 27): <https://mmm2020.jhu.edu/#>

We hope you can join us in the MMM conference and look forward to seeing you in Baltimore.

Best wishes,

Philippe Geubelle, University of Illinois at Urbana-Champaign

Lori Graham-Brady, Johns Hopkins University

James Kermode, University of Warwick

Jaroslav Knap, Army Research Laboratory

Marisol Koslowski, Purdue University

Maryam Shakiba, Virginia Tech

Michael Shields, Johns Hopkins University

Xiang Zhang, University of Wyoming