## PREFACE: MULTISCALE PLASTICITY AND RELATED TOPICS

This special issue on "Multiscale Plasticity and Related Topics" is dedicated to the memory of Christian Miehe, who served as associate editor of this journal, *International Journal for Multiscale Computational Engineering*, from November 2015 until his untimely death in August 2016. Christian Miehe obtained his PhD from the University of Hannover in 1988. After holding posts at Stanford University and University of Hannover, he became full professor of applied mechanics and material theory at the Institute of Applied Mechanics, Faculty of Civil and Environmental Engineering, University of Stuttgart in 1995, and kept this position for the remainder of his life.

Christian Miehe is considered one of the leading and most influential scientists in the field of computational mechanics. He made groundbreaking contributions to topics such as computational plasticity, crack propagation and damage, and the thermomechanical modeling of polymers. There, he made deep impacts on the development of novel material models, such as phase-field formulations as well as consistent numerical algorithms. Additionally, recurrent themes of his work are his occupation with multiscale problems at small and finite strains for classical and multiphysical formulations.

We remember Christian Miehe as a friend and scientist with a keen intellect and a deep urge to search for scientific truth. Scientific progress was always more important to him than his personal ambitions. His students, coworkers, and colleagues could always count on his unlimited support. He was full of ideas and always willing to share them. He is thoroughly missed.

**Guest Editors:** 

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