

Speaker of Session 11

NANOMECHANICS



Steven W. Cranford, Ph.D., is an Assistant Professor of Civil and Environmental Engineering at Northeastern University. He received his B.Eng. degree from Memorial University in Newfoundland, Canada in 2006, M.Sci. degree from Stanford University, California in 2008, and Ph.D. degree from Massachusetts Institute of Technology, Massachusetts in 2012, all in Civil and Environmental Engineering. He joined the faculty at Northeastern in 2012, founding the Laboratory of Nanotechnology In Civil Engineering (NICE). His research focus is on the mechanical characterization and modeling of complex material systems, including synthetic and biological systems, using full atomistic methods, molecular dynamics, and the development of multi-scale approaches, drawing theoretical appraoches

from atomistic to continuum scales. He has a particular interest on the implementation and development of tunable and mutable material systems. He is an active proponent of the field of materiomics, a cross-scale holistic approach to materials-by-design. In the previous five years, he has published over 35 peer-reviewed papers in the areas of computational materials science and nanomechanics (Google Scholar: H-index = 18; Citations > 700). He has also co-authored a monograph entitled Biomateriomics (Springer, 2012), and has contributed chapters to five texts in the field of nanomechanics and materials modeling. He is an active member of the American Society of Civil Engineers (ASCE), American Society of Mechanical Engineers (ASME), American Chemical Society (ACS), Materials Research Society (MRS), and the Society of Engineering Sciences (SES).

4th International Symposium on Energy Challenges and Mechanics - working on small scales 11-13 August 2015, Aberdeen, Scotland, United Kingdom

