

Proudly Operated by Ballelle Since 1965

Frontiers in Materials Science and Advanced Computing, Mathematics, and Data Seminar Series

Advanced Potential Energy Surfaces for Condensed Phase Simulation



Teresa Head-Gordon

Professor, UC Berkeley Scientist, Lawrence Berkeley National Laboratory

January 26, 2015 10-11 a.m. ETB Columbia River Room

In her talk, Dr. Head-Gordon will introduce new theoretical models and methods that include direct and mutual polarization based on the AMOEBA (atomic multipole optimized energetics for biomolecular applications) polarizable force field and a Poisson-Boltzmann semi-analytic method. These models and their implementations on multicores are opening new abilities to allow larger scales of study for molecular simulation with more complex potential energy surfaces.

Dr. Head-Gordon is a professor at UC Berkeley in the departments of Chemistry, Bioengineering, and Chemical and Biomolecular Engineering, and a scientist at the Lawrence Berkeley National Laboratory. Her research program focuses on the interface of theoretical chemistry with biology and physics.

Hosted by:

•Dr. Christopher Mundy, 509-375-2404, <u>chris.mundy@pnnl.gov</u>, for MS³ •Dr. Nathan Baker, 509-375-3997, <u>Nathan.Baker@pnnl.gov</u>, for CM4



www.pnnl.gov