Two PhD Positions Available in Nano- and Meso-Chemo-Mechanics

We are currently looking for two outstanding and passionate PhD students to become a part of Advanced Infrastructure Materials and Systems laboratory, AIMS lab. The overall research objective of our group is on the fundamental understanding of the relation between macroscopic physical properties of materials and their structure at the nano- and meso-scales. Within this theme, we are currently working on several state-of-the-art applied problems, ranging from in silico design of the next generation of cementitious materials, unraveling meso-scale (10-100nm) structure of cement paste, molecular design of nano-ceramics with ultra-high fracture toughness, to design of thermoelectric materials with applications in semiconductor industries. These projects are highly multi-disciplinary and involve close collaborations with experimental and theoretical colleagues on- and off-campus.

The candidate with strong background in mechanics of materials, thermodynamics, statistical physics, computational mechanics and atomistic simulation of materials are prioritized for these highly competitive positions. The successful candidates should be able to work individually on their PhD thesis projects and at the same time have meaningful contributions to our vibrant and cooperative research with our collaborators across the globe.

UCIrvine is one of the ten campuses of University of California, located at the heart of scenic Orange County by Pacific Ocean. UCIrvine is an aspiring research institute with excellent research facilities featuring high-performance computing (HPC) resources and Lexi lab, a truly cutting edge materials characterization user facility. Financial aids in terms of discounted on-campus housing, full tuition waiver and salaries are offer on a competitive basis through our research and teaching assistantship programs.

Interested domestic and international students with prior research experience (minimum of 1 year) preferably with ISI publication records are encouraged to contact us at mjaq@uci.edu and formally apply to our graduate program, see the details at http://www.eng.uci.edu/dept/cee/graduate.