## Postdoctoral Associate position available at Rice University

**Position Description:** A postdoctoral associate position is available at Rice University in the area of atomistic and molecular modeling of nanoscale friction and defects in an assembly of nanoparticles. Computational techniques will be integrated to approaches from statistical mechanics and physical chemistry to provide quantitative predictions of properties of complex oxide materials across different time- and length-scales. The research will be carried out at Rice University's Multiscale Materials Modeling Lab.

**Qualifications:** A Ph.D. in materials science, chemistry, physics, engineering or a related field is required. The candidate should have well-developed computational skills, a strong background and motivation in materials modeling and simulation, preferably experience in the areas of *abinitio* calculations, molecular dynamics simulations and familiar with defects, dislocations and deformation-based mechanisms. Good written and spoken communication skills are expected.

**How to apply:** Please send a CV, three representative publications, and contact information of three references to rouzbeh@rice.edu. Evaluation of candidates will begin immediately and will continue until the position is filled. For any questions, please contact Dr. Rouzbeh Shahsavari:

#### **Contact information:**

Rouzbeh Shahsavari, Ph.D. Assistant Professor Principal Investigator, Multiscale Materials Modeling Lab Department of Civil and Environmental Engineering Rice University, Houston, TX.

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#### **About Rice University (www.rice.edu):**

Rice University is located in Houston and is one of the leading teaching and research universities of the United States. In materials research, Rice University is a preeminent international institute and a leader in nanoscience. Times Higher Education (THE), a UK publication for professionals in education and research, has mentioned Rice No. 1 in the world in materials science research, based on the number of citations per paper between 1999 and 2009. Rice is ranked the nation's 17th-best overall university by *U.S. News & World Report*.

### **About Houston:**

Houston is the 4<sup>th</sup> largest city in US and is considered the energy capital of the world particularly because of its great investments in technology and research in oil and natural gas, energy-efficient infrastructures, renewable energy sources, wind, and solar energy. Houston is a multicultural city with the second-largest concentration of arts and theaters in the US.

# **About the Department:**

The Department of Civil and Environmental Engineering at Rice focuses on research areas that involve collaborative efforts with professors and students from numerous departments and institutes across campus. This freedom to pursue a truly interdisciplinary research-based education in Civil and Environmental Engineering has benefited the graduate students and post-doctoral associates intellectually and professionally. As the world embraces ever more complex technological approaches, the department stands ready to meet the challenge of the future with a strong engineering base and interdisciplinary exposure for the researchers of the future.