



## **Multiple Post-Doctoral Positions in Advanced Synthesis and Characterization at Rice University**

**Position Description:** Multiple postdoctoral associate positions in the area of advanced synthesis and nano/micro-scale characterization of nanoparticles and nanocomposites are available at Rice University. Various techniques will be applied to synthesize and self-assemble size- and shape-controlled (calcium) silicate-polymer nanoparticles followed by nano- and micro-characterizations including a myriad of probes such as electron microscopies (TEM, XRD, SEM, AFM), ICP, XPS, NMR, porosimetry, dynamic mechanical analysis, nanoindentation, etc. to examine several structural and physical properties along with response mechanisms at high temperatures, high pressures and extreme chemical conditions.

The research will be carried out at Rice University's Department of Materials Science and NanoEngineering, Department of Chemistry and Department of Civil and Environmental Engineering. The successful candidates will work in a highly inter-disciplinary and stimulating environment.

**Qualifications:** A Ph.D. in materials science, chemistry, physics, engineering or a related field is required. The candidates should have well-developed experimental skills. Candidates with a strong background and motivation in organic/inorganic chemistry, wet chemistry, self-assembly, nanoparticle/nanocomposite synthesis and characterizations are highly encouraged to apply. 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:**

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### **About Rice University ([www.rice.edu](http://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 highly multicultural city with the second-largest concentration of arts and theaters in the US.

**About the Departments:**

The Department of Materials Science and NanoEngineering, the Department of Chemistry, and the Department of Civil and Environmental Engineering at Rice University focus on research areas that involve collaborative efforts with professors and students from numerous institutes across and outside the campus. This freedom to pursue a truly interdisciplinary research-based education has benefited the graduate students and post-doctoral associates intellectually and professionally. As the world embraces ever more complex technological approaches, such collaborative environments are essential to meet the challenge of the future with a strong system-base approach and interdisciplinary exposure for the researchers of the future.