Purdue University Colleges of Engineering and Science

Faculty Openings in Predictive Science & Engineering for Decision-Making

The College of Engineering and the College of Science at Purdue University have identified predictive science & engineering for decision-making in the field of material/product co-design as a strategic area for multi-disciplinary discovery and learning. We are currently accepting applications to fill multiple positions for tenure-track and tenured positions at the Assistant and Full Professor levels.

The ability to predict performance with quantified confidence via an optimal combination of experiments, theory and simulation is expected to lead to shorter and less costly development and certification cycles for new materials enabling material/product co-design for a wide range of applications. Purdue's Predictive Science and Engineering initiative aims at the synergistic integration of state-of-the-art modeling and simulation, high-performance computing, uncertainty quantification, and design of experiments to achieve this goal. The effort builds on Purdue's strengths and leverages capabilities in these areas in the Engineering and Science colleges as well as Discovery Park.

Candidates must hold a Ph.D. degree in a field of Engineering or Science related to the initiative. They should have a distinguished academic record, exceptional potential for world-class research, and a commitment to teaching and collaboration. Areas of interest include, but are not limited to, the following: i) uncertainty quantification for decision-making and design of physical and computational experiments; ii) predictive, multi-scale modeling of materials and devices including their processing and fabrication; iii) extreme-scale computing for science and engineering of materials; iv) multi-fidelity, on-demand experimentation at the material and product level. Experience or interest in multiple of these areas or related expertise is sought.

The successful candidate will teach undergraduate and graduate courses in topics related to disciplines involved, conduct research in their field of expertise, publish and present research findings, participate in professional activities, and advise graduate students. Individuals with a track record and interest in cross-discipline interactions and broad impact across Engineering and Science are especially encouraged to apply. The primary faculty appointment will be in a school of the College of Engineering or a department of the College of Science and will depend on the candidate's qualifications; cross-department appointments are anticipated.

Candidates should submit their application online at: http://eng.purdue.edu/PredictiveSE. The application should include a cover letter, a complete and detailed vitae, and statements of research and teaching interests. Also, please include names, addresses, telephone numbers, and e-mail addresses for three or more references. For questions regarding the application process, please contact Marion Ragland (ragland@purdue.edu). Screening of applications will begin March15, 2013 and will continue until the position is filled. A background check will be required for employment in this position.

Purdue University is an Equal Opportunity/Equal Access/Affirmative Action Employer fully committed to achieving a diverse work force.