

**Postdoctoral Research Associate
Theoretical and Computational Biophysics Group
Beckman Institute for Advanced Science and Technology
University of Illinois at Urbana-Champaign**

The Theoretical and Computational Biophysics Group (www.ks.uiuc.edu) at the University of Illinois at Urbana-Champaign (UIUC) invites applications for a Postdoctoral Research Associate position in Computational Biophysics of Biotechnological Processes.

The position is funded by the Berkeley – University of Illinois joint Energy Biosciences Institute. Work will be carried out at the Beckman Institute for Advanced Science and Technology on the UIUC campus with regularly visits to the Berkeley campus. The research employs state-of-the-art molecular dynamics simulations to guide the development of second-generation biofuel production. Molecular modeling investigates at the electronic and atomic level the optimization of enzymes that can degrade efficiently cellulose from different sources, in particular from agricultural waste. It investigates also the novel use of polymers to enhance biomass degradation. Lastly, the research investigates the synergistic mechanism by which a broad range of bacterial enzymes cooperate with each other in different steps of the degradation process.

The research will be carried out in a world-leading team of physicists and bioengineers with access to the most advanced computer software and backed up by software engineers and theoreticians. Computations will take advantage of some of the most powerful computers in the US.

Requirements: A doctoral degree in the biological, chemical or physical sciences, and three years of experience in molecular modeling and dynamics.

Preferences: Experience with NAMD, VMD and with molecule parameterization. Experience with molecular modeling and simulation of cellulose and cellulases is also desirable, but not necessary.

The postdoctoral position is a 100% full-time, benefits-eligible academic position with the University of Illinois. Applicants must be eligible to work in the United States and salary is commensurate with qualifications and experience. In order to ensure full consideration, applications must be received by January 31, 2014.

Please send resume (e-mail preferred, pdf file format) with cover letter and three references to:

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The University of Illinois is an affirmative action, equal opportunity employer.