

Post-doctoral Positions in Fakhraai Group at the University of Pennsylvania

A Postdoctoral Researcher position is available for the [Research and Education in Active Coatings Technologies for the Human Habitat \(REACT\)](#) project at the University of Pennsylvania for US citizens and permanent residents. The project is related to [ACT3](#), Self-assembled Nanomaterials for Energy Generation and Storage. The work will be primarily conducted in Professor Fakhraai's lab in collaboration with Professor Composto and collaborators at CEA, Grenoble. The project will be focused on aligning anisotropic nanoparticles in homopolymer and block copolymer thin films using solvent annealing, electric field, and other external stimuli.

REACT is an international partnership with Grenoble Innovation for Advanced New Technologies (GIANT). During the REACT traineeship, the expectations are that the postdoctoral researcher will contribute to research relevant to the ACT to which they have been accepted and will spend one summer at GIANT in Grenoble, France conducting research there and participating in the GIANT internship program.

Trainees will also participate in specific REACT programming to provide experience in communicating technical information and teaching. This programming will be structured with components at Penn, at GIANT, and at our local academic partners (Bryn Mawr and Villanova). There also will be many opportunities to be involved with the larger REACT community and for outreach for REACT. The trainees will play an integral part in the REACT research and larger REACT community.

Candidates with interdisciplinary background in physics, chemistry, materials science and engineering, or electrical engineering will be well suited for this position. Some knowledge of nanoparticle synthesis, thin film characterization, and optical characterizations are required. Background in ellipsometry characterization of thin films or small angle X-ray scattering is preferred but not required.

The position is open to US citizens and permanent residents only. Priority will be given to candidates that are eligible to apply for University of Pennsylvania's [academic diversity fellowships](#). The preferred start date for the position is September 1, 2018, but earlier start dates will be considered. Applicants will be considered on a rolling basis and the call will remain open until the position is filled. Interested candidates are encouraged to send a CV, a brief statement of research interests, and the list of three letter writers to Zahra Fakhraai at fakhraai@sas.upenn.edu.