



Postdoctoral Researcher Position at the University of Pennsylvania

Polymer Nanocomposites

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Project Description

We have a new collaboration with an industrial partner to study the mechanical properties of polymer nanocomposites with the specific goal of understanding creep mechanisms. The project involves designing, fabricating, characterizing and modeling polymer nanocomposites to investigate the role of nanoparticle/polymer interactions, polymer molecular weight, nanoparticle shape/size, and nanocomposite morphology on the polymer dynamics and mechanical properties. Within the multidisciplinary team that includes researchers from industry and academia, this postdoc will lead the experimental efforts in fabrication and testing, while a member of Prof. Rob Riggelman's group will lead the computational effort.

Qualifications

Successful candidates should be highly motivated and have a recent Ph.D. degree. A strong background in one or more of the following is desirable: polymer nanocomposites, mechanical properties of polymers, morphology characterization (X-ray scattering, SEM, TEM), polymer physics. Strong communication skills are expected.

Application

Qualified individuals should submit their resume (no page limit) and contact information for two references by email to Prof. Winey (winey@seas.upenn.edu). Applications will be reviewed as received and the start date is flexible.