Postdoctoral Position in the Field of Microfluidics and/or Soft Matter
National Institute of Standards and Technology
Gaithersburg, MD

A postdoctoral opportunity is available to join a collaborative research team developing a novel neutron interferometric phase imaging instrument that will enable the characterization of local nanostructure in heterogeneous materials. This instrument will enable unprecedented understanding in materials as diverse as blood clots, concrete, batteries, tissue scaffolding and 3D printed materials.

This project involves development of a long-lasting microfluidic device with independent control of 100s to 1000s of channels and is critical to the development of the neutron interferometer. Aspects of this project include formulation and characterization fluids with novel neutron optical properties, development of the microfluidic device and channel control scheme, and ultimately characterization of the device lifetime and failure modes.

In addition to device development, a successful candidate will have ample opportunity to engage in soft materials and complex fluids research on both collaborative and independent projects. Because our team is interested in studying a broad range of material types, this position affords a great deal of independence and flexibility with respect to project direction. To this end, applicants should prepare a statement of research interests that specifically highlights how you would utilize SANS and other neutron characterization methods in the course of your research.

Successful candidates will have a PhD in Chemical Engineering, Materials Science, Mechanical Engineering, Physics, Chemistry or related fields. Experience with designing microfluidic devices, synthesis and functionalization of nanoparticles and/or small angle scattering is desirable but not required.

To apply please send an electronic copy of your resume, references and brief research statement (not to exceed one page) to:

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