



Carnegie Mellon University
**Materials
Characterization
Facility**

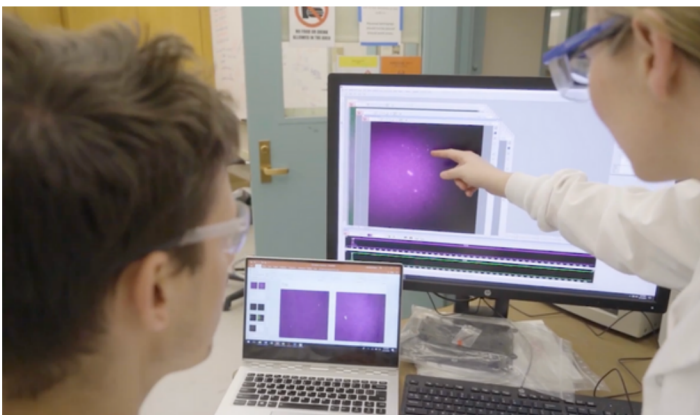
**Carnegie
Mellon
University**
Mechanical
Engineering



POSTDOCTORAL RESEARCHER

Carnegie Mellon University's Department of Mechanical Engineering and Materials Characterization Facility (MCF) are searching for a Postdoctoral Researcher to join their team. This is a unique opportunity for someone who wants to explore high-throughput structural assessment of DNA nanotechnology while also engaging the broader research community as the SAXS specialist in the MCF.

In the Taylor Lab, you will investigate approaches for high-throughput synthesis as well as SAXS-based characterization of DNA origami nanostructures. As the SAXS specialist, you will be the primary point of contact for the Xenocs Xeuss 3.0 SAXS by supporting users through leading training sessions, providing guidance on techniques and data analysis, and running samples on behalf of external/remote users.



This position will split time evenly between the Taylor Lab and MCF.

Core responsibilities include:

- Design, synthesize and characterize a variety of nucleic acid nanostructures and machines
- Collaborate effectively to provide nanostructures to collaborating researchers
- Communicate findings at meetings and conferences, and in journal publications.
- Engage the SAXS user base by providing training and providing assistance to internal and external users
- Maintain and coordinate the maintenance of the SAXS with the Xenocs team
- Support troubleshooting on the instrument
- Train junior lab members in essential research skills

Qualifications:

- Ph.D. in materials science, chemistry, engineering, physics or related discipline is required.
- Graduate level research experience with SAXS is required.
- Prior experience with DNA nanotechnology is preferred.
- Expertise with one or more SAXS analysis programs (RAW, XSACT, SAXSUtilities, SAXSview, TVIEW, etc.) is preferred.
- OriginPro, Powerpoint, Excel are valuable software skills.
- Strong verbal and written communication skills and a passion for research are required.
- Must possess an eagerness to learn new techniques and lead projects independently.

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