Postdoctoral Opening in Advanced Characterization

The Amanchukwu Laboratory at the University of Chicago invites applications for a postdoctoral position focusing on the development of advanced characterization tools based on calorimetry to study electrolytes and probe desired and undesired reaction processes at the electrode:electrolyte interface in energy storage and electrocatalysis. The ideal candidate is a chemical engineer, mechanical engineer, or scientist/engineer excited about instrumentation/methodology development for battery and catalytic characterization. The candidate must have strong background in thermodynamics and understanding of thermal processes. There are numerous opportunities for the candidate to engage with the equipment manufacturer, collaborators at the University of Chicago and at Argonne National Lab (especially the Argonne Photon Source). The duration of the appointment is one year with a flexible start date. Reappointment will be possible, but dependent on performance and availability of funds.

Application details: Please send an electronic copy of your CV, brief (1 page) statement of research interests and future career goals. Use the Subject Line “Postdoc Application Advanced Characterization.” Email chibueze@uchicago.edu

Ideal skills: Applicant must have solid background in thermodynamics and heat transfer. Applicant should have a PhD in mechanical engineering, chemical engineering or similar. Prior experience in tool/equipment design or methodology development is a plus. No prior experience in batteries, electrolytes, or sustainability is required.

Location: On-site at the University of Chicago.

Ideal applicants: Applicant must be self-motivated, driven and must be interested in working with students (undergraduates and graduate students). Applicant may be expected to work with the PI and contribute to grant applications. Applicant will be expected to apply to eligible fellowship opportunities that can support their work.

The Amanchukwu Lab focuses on the design of novel electrolytes with the focus of correlating bulk solvation properties to electrochemical phenomena in batteries and electrocatalysis. The PI holds a joint appointment at the University of Chicago and at Argonne National Laboratory. The Pritzker School of Molecular Engineering at the University of Chicago is the first school of molecular engineering in the United States with a focus on changing the way engineering challenges are solved. Furthermore, Chicago is a world class city with so much to do.

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