Postdoctoral Opening in Electrolytes and Energy Storage

The Amanchukwu Laboratory at the University of Chicago invites applications for a postdoctoral position focusing on electrolyte design for energy storage and electrocatalytic applications. One project involves the synthesis of new small molecule and polymer electrolytes that can yield high ionic conductivity with improved electrochemical and chemical stability. A new class of compounds will be synthesized, characterized, and incorporated in different battery chemistries. Tasks include organic synthesis, ion transport characterization using nuclear magnetic resonance (NMR), electrochemical impedance spectroscopy (EIS) etc., battery fabrication and characterization, investigation of reaction and decomposition pathways. 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, and three letters of recommendation. Use the Subject line “Postdoc Application Electrolytes Energy Storage”

Ideal skills: Experience and confidence in organic synthesis/purification is required. Familiarity with tools such as NMR, MS, EIS, GPC or battery fabrication and characterization is also desired but not required.

Ideal applicants: Creative applicants are sought who are passionate about contributing to the world’s transition to sustainable energy technologies. Since the Amanchukwu Lab is a new lab, the applicant must be interested in mentoring graduate (and undergraduate) students, and help build a collegial and supportive working environment. Furthermore, the applicant will have the ability to mold the direction and the challenges that the lab strives to take in the coming years.

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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Postdoctoral Opening in Electrolytes and Electrocatalysis

The Amanchukwu Laboratory at the University of Chicago invites applications for a postdoctoral position focusing on electrolyte design for energy storage and electrocatalytic applications. One project involves the study of electrolyte influence on carbon dioxide reduction. The lab is interested in studying new classes of electrolytes to control CO₂ mass transport and ion transport to yield higher product selectivity and Faradaic efficiencies. Tasks include electrolyte fabrication, electrocatalysis with CO₂, product characterization using tools such as GCMS and NMR, catalyst characterization using a multitude of surface characterization techniques, and in situ studies to probe electrolyte influence. There will be opportunities to work at Argonne National Lab and use its world-class facilities. 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, and three letters of recommendation. Use the Subject Line “Postdoc Application Electrolytes Electrocatalysis.”

Ideal skills: Experience and confidence in electrocatalysis/electrochemistry is required. Familiarity with tools such as NMR, GCMS, SEIRAS, in situ setup/characterization is also desired but not required.

Ideal applicants: Creative applicants are sought who are passionate about contributing to the world’s transition to sustainable energy technologies. Since the Amanchukwu Lab is a new lab, the applicant must be interested in mentoring graduate (and undergraduate) students, and help build a collegial and supportive working environment. Furthermore, the applicant will have the ability to mold the direction and the challenges that the lab solves in the coming years.

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