

Postdoc Researcher Position in Prof. Wenzhen Li group at Iowa State University

Prof. Wenzhen Li group (<http://www.wzli-lab.com>) at Iowa State University develops new electrocatalysts and flow electrolyzers for the capture and conversion of waste resources, such as CO₂, nitrate, etc, to valuable chemicals, such as formate, syngas, ethylene, ethanol, hydroxylamine, urea, etc. Our research expertise and experiences include a range of wet-chemical and electrochemical techniques for catalyst synthesis, electroanalytical methods, electrochemical cell design, tests of electrocatalyst performances, and modeling of electrochemical devices.

We are seeking a highly motivated postdoc researcher to expand our research in urea electrosynthesis from co-reduction of CO₂ and nitrate reduction. This research is supported by NSF EPSCoR program (4 years stable fund). The postdoc researcher is expected to:

- Have a B.S. or M.S. in Physical Chemistry, Material Chemistry, Chemical Engineering, Environmental Engineering, or a relevant area
- Strong background in electrochemistry, electrocatalysis, materials synthesis and characterization, and electrochemical tests
- Self-motivated researcher to strong desire to pursue scientific and technical breakthroughs
- Familiar with heterogeneous catalysis, nanoparticle synthesis, and reactor design
- Synthesize and characterize advanced metallic catalysts
- Evaluate urea synthesis performance in H-type and flow cells
- Optimize electrode structure and rationally design flow cell to promote the yield urea product
- Perform structural, electrocatalytic, and product analysis studies
- Excellent spoken and written English communication skills
- Team-work spirit

How to apply: Please send your resume and application to Prof. Wenzhen Li (wzli@iastate.edu)

About Chemical & Biological Engineering (CBE) department: Our CBE department ranks top 30 among all US universities, and is strong in catalysis, biorenewables, renewable energy, health care technologies, biomedical engineering, and computational fluid dynamics. CBE has close research collaboration with Departments of Chemistry, Materials Science & Engineering, Mechanical Engineering, etc.

About Iowa State University: ISU is a public land-grant research university in Ames, Iowa. It is the largest university in the state of Iowa and the third largest university in the Big 12 athletic conference. ISU was ranked as R1: Doctoral Universities – Very high research activity", and a strong research tradition in agriculture, engineering, and science.

About Ames, Iowa: Ames has affordable, culturally vibrant communities with healthy economies and a young, well-educated population. Ames was ranked the Best College Town in US in 2019 (by 24/7 Wall St), No. 8 city with the most doctoral degrees (9.5%) and one safest college town. Ames is about 5 driving distance to Chicago.