Postdoctoral Researcher Position Available
Development and Testing of Novel Sorbents for CO₂ capture from Ambient Air

Description: The Green lab at Arizona State University (ASU) has an opening for a postdoctoral researcher to develop sorbents and systems for CO₂ capture. The lab, in collaboration with the Center for Negative Carbon Emissions (CNCE) at ASU, designs novel air capture systems for microgravity (supported by NASA), creates continuous capture modules for CO₂ capture from ambient air (supported by ARPA-E), develops omniphobic CO₂ sorbents to interface with microbial conversion processes (supported by DOE EERE BETO), and is actively commercializing a passive collection system (supported by startup company Silicon Kingdom Holdings, LLC). In order to improve the technoeconomic feasibility of direct air capture (DAC) of CO₂, research into new sorbent materials, innovative form factors, and integrated capture systems is needed. This postdoctoral research opportunity will involve sorbent synthesis, material processing, and CO₂ capture performance testing under a wide range of environmental conditions.

A successful candidate will be able to operate independently, contribute to and advance the scientific and research directions, and work in a multidisciplinary environment.

Deadline: The position is open until filled.

Start Date: Available immediately. The position offered is for one year and may be renewed subject to satisfactory performance and availability of funds.

Required and Desired Qualifications: The applicant must have a Ph.D. in chemical engineering, chemistry, or a related discipline on or before the start date. The applicant must have strong written and verbal communication skills.

Applicants with experience in polymer and monomer synthesis, thermomechanical characterization, and analysis of morphological properties are strongly encouraged to apply. Applicants with experience characterizing transport and permeation behavior in sorbents, membranes, and polymeric substrates are strongly encouraged to apply.

How to apply: Email a complete CV, including the contact information for three references, to Prof. Matthew Green (mdgreen8@asu.edu) with the subject line “CO₂ sorbent development – postdoctoral application”.

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