RESEARCH FOUNDATION CUNY

Careers at RFCUNY
Job Openings

Job Title	Postdoctoral Research Associate
PVN ID	HC-2406-006296
Category	Postdoctoral
Location	HUNTER COLLEGE
Department	Physics & Astronomy
Status	Full Time
Annual Salary	$60,000.00 - $60,000.00
Hour(s) a Week	35
Closing Date	Aug 20, 2024 (Or Until Filled)

General Description

A one-year postdoctoral research position is offered at Hunter College of the City University of New York, beginning around October 15, 2024. The position is renewable for an additional two years by mutual agreement. The research program, in collaboration with NASA's Jet Propulsion Laboratory (JPL), concerns liquid and solid-state NMR of materials being evaluated for advanced batteries with a wide operating temperature range for planetary exploration missions.

In addition to performing research, responsibilities include assisting in the training of graduate and undergraduate research students, and routine spectrometer maintenance (e.g. cryofills). Facilities include a Bruker Neo 500 with solid-state rack and MAS probes, a 400 SB Bruker Avance III spectrometer equipped with liquid-state NMR probe with a z-gradient coil (maximum 55 G/cm), a Varian Direct Digital Drive 300 with widebore magnet, MAS probes, gradient channel and DOTY pfg probe (1100 G/cm), a homebuilt high pressure NMR system based on a Tecmag Apollo NMR, a Stelar Spinmaster (1T) Fast Field Cycling Relaxometer, and access to the NY Structural Biology NMR Center housed at the nearby City College of New York (www.nysbc.org).

Some of this work will be conducted in collaboration with Prof. Rob Messinger at City College. The postdoctoral fellow will also have access to the CUNY Advanced Science Research Center (ASRC) NMR facilities, which include Bruker AVANCE III HD 600, 700, and 800 MHz spectrometers; the 600 MHz spectrometer in particular has a PhoenixNMR 1.6-mm HXY MAS probe and all three spectrometers have solution-state cryoprobes.

Additional information regarding the CUNY ASRC NMR facilities can be found here: http://structbio.asrc.cuny.edu/facilities/nmr-spectroscopy/instrument-list/

Interested persons should submit a CV and the names and e-mail addresses of two references. If you have any questions, please email Prof. Steve Greenbaum, Department of Physics & Astronomy, Hunter College of CUNY, 695 Park Avenue, New York, NY 10065 at steve.greenbaum@hunter.cuny.edu

Other Duties

Other duties as assigned

Qualifications

- The requirements for the position are a Ph.D. in chemistry, physics, or engineering, and significant experience in standard solid-state NMR techniques (e.g. CP/MAS, MQ-MAS, etc).
- Experience with pulsed-field-gradient diffusion methods is advantageous, as is experience with Fast Field Cycling Relaxometry.
- Substantial experience with standard solid state NMR methods, pulse programming, and routine spectrometer maintenance.