

# NASA-CCNY

## Center for Advanced Batteries for Space



Principal Investigator: Dr. Robert J. Messinger, City College of New York, CUNY  
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The NASA-CCNY Center for Advanced Batteries for Space is recruiting talented undergraduates for an exciting summer internship.

- The NASA-CCNY Center for Advanced Batteries for Space is a joint research and education center between The City College of New York, NASA's Jet Propulsion Lab, & regional universities that offers a collaborative research network in electrochemical energy storage & a multi-faceted student internship program. Our research objectives are to develop novel battery materials, chemistries, & prototypes that operate under the extreme conditions necessary to significantly enhance the scope & ambition of future NASA planetary science missions.
- This 10-week internship will run from June 5, 2023 through August 11, 2023.
- Learn how to address the needs of batteries to operate in extreme conditions including making novel batteries and utilizing ionic liquid electrolytes
- Work with a multi-disciplinary team of CCNY chemical engineering faculty, postdoctoral researchers, Ph.D. & undergraduate students, & collaborators

### Eligibility Requirements & Stipend:

- Minimum 3.0 G.P.A.
- Major in Chemical Engineering, Chemistry, Physics or a related discipline
- Participants will receive a \$6,000 stipend.

**\*\*Students from under-represented groups are particularly encouraged to apply\*\***

Interested? Submit your resume & unofficial transcript to [SLallramnarine@gcc.cuny.edu](mailto:SLallramnarine@gcc.cuny.edu) by Feb. 14th, 2023.

# NASA-CCNY Center for Advanced Batteries for Space Program Highlights 2022



**2022 Summer Intern: Elijah Bernard**

## **Recent Research Presentations:**

- Elijah Bernard, Michael Keating, Sharon Lall-Ramnarine, Elizabeth Biddinger, Development of Ionic Liquid & Solvate Ionic Liquid Electrolyte for low temperature Li-metal battery, CCNY Department of Chemical Engineering & NASA summer intern presentation, Aug 2022
- Elijah Bernard, Michael Keating, Sharon Lall-Ramnarine and Elizabeth Biddinger, Development of Ionic Liquid & Solvate Ionic Liquid Electrolyte for low temperature Li-metal battery, CUNY Research Scholars Program Summer Symposium, CUNY Zoom, July 2022
- Elijah Bernard, Domenec Paterno, Sophia Suarez and Sharon Lall-Ramnarine, Development of Electrospun Ionic Liquid-Polymer Membranes, Presented Virtually at the New York American Chemical Society's 69th Annual Undergraduate Research Symposium, May 7, 2022.
- Elijah Bernard, Domenec Paterno, Sophia Suarez and Sharon Lall-Ramnarine, Development of Electrospun Ionic Liquid-Polymer Membranes, Presented Virtually at the 2022 Queensborough Community College Spring Student Symposium, May 6, 2022.