



Principal Investigator: Shudipto Konika Dishari

Position Title: Ross McCollum Associate Professor

Department: Chemical and Biomolecular Engineering

Email: sdishari2@unl.edu

Phone: 402-472-7537

Webpage: <https://engineering.unl.edu/person/shudipto-dishari/>

Project Title.

Natural Polymer Electrolytes for Sustainable Batteries

Abstract.

This project aims to develop safer, eco-friendly, efficient batteries using Nebraska's abundant agricultural resources. The team will convert a plant-based material into advanced, safer, cheaper battery components to address key challenges and improve metal-ion battery performances. Such advancements can support efficient, cost-effective energy storage for consumer electronics, electric vehicles, and transform grid-scale energy storage.