MISSION: To develop an understanding of how key electrode reactions occur, and how they can be controlled to improve electrochemical performance, from the atomistic level to the macroscopic level throughout the lifetime of the operating battery.

RESEARCH PLAN

The processes that occur in batteries are complex, spanning a wide range of time and length scales. The team of experimentalists and theorists will develop and use new methodologies to determine how model compound electrodes function in real time, as batteries are cycled.