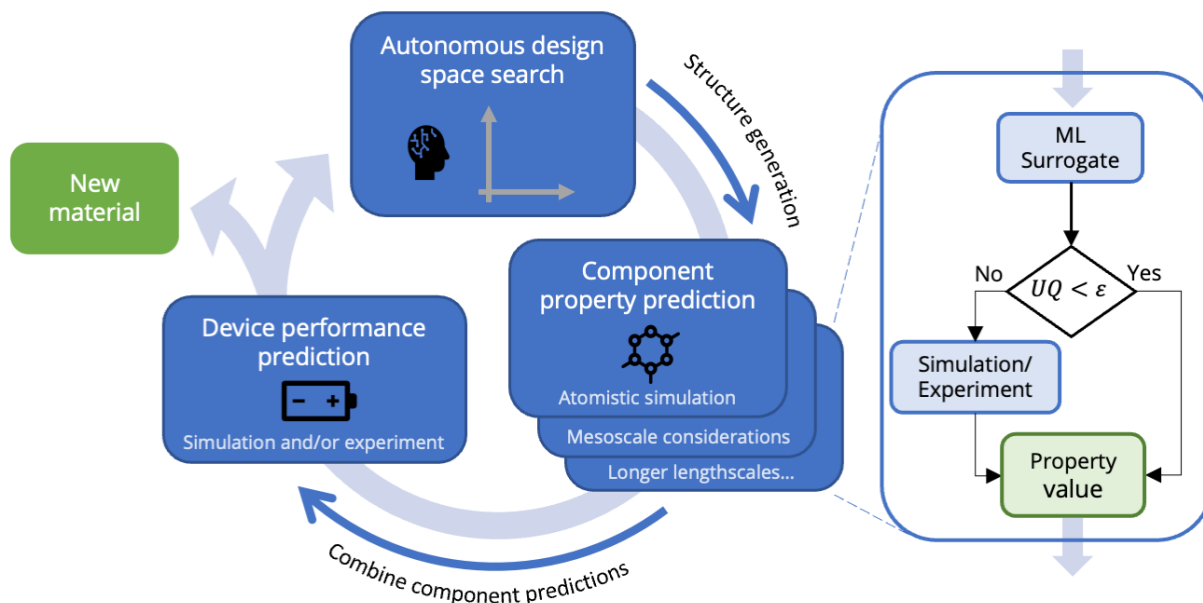


AutoMat: Automated Materials Discovery for Electrochemical systems

GOAL

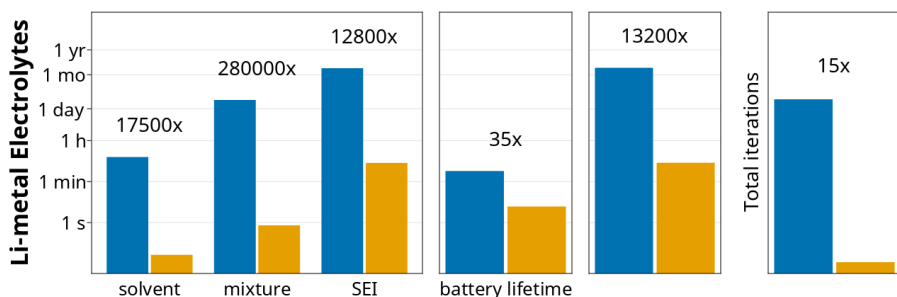
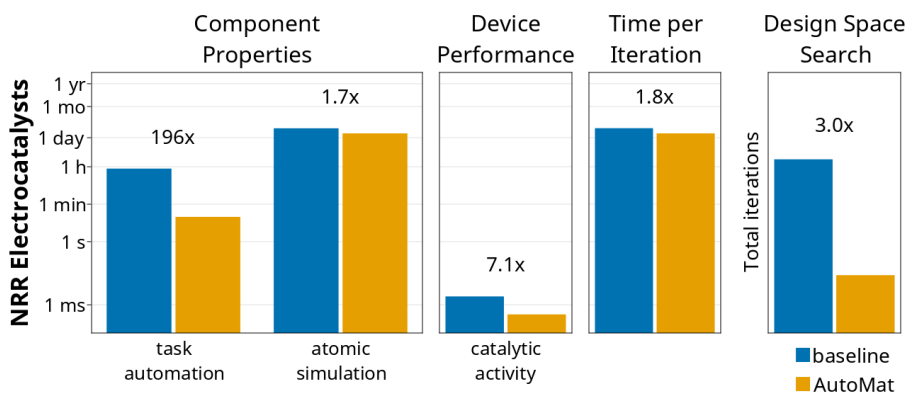
To enable **rapid, high-fidelity screening** of large numbers of **electrochemical functional materials** for use in new energy technologies, and thereby **accelerate** the overall material development and optimization process **by at least 80%**.

Approach



Device performance predictions are accelerated through our workflow driver that automates device performance and component property prediction by removing delays from human intervention. The driver dynamically adjusts the component property fidelity (experiment, simulation, data-driven) to trade off evaluation time/cost and prediction accuracy.

Acceleration: baseline simulation vs. AutoMat accelerated simulation



To learn more about the project, our team, and the software we are building, visit <https://www.cmu.edu/aced>

