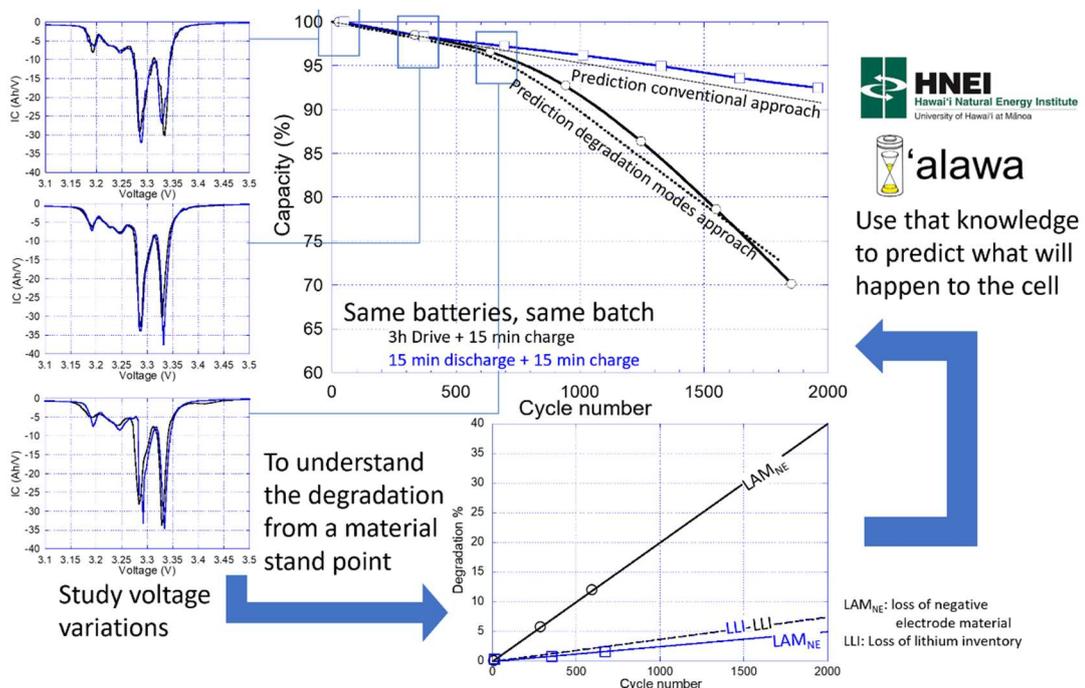


## ACCURE and HNEI take battery analytics to the next level

Hawaii Natural Energy Institute (HNEI) and ACCURE Battery Intelligence team up to develop novel approaches for the determination of the safety and lifetime of battery systems based on production and operation data.

HNEI is focused on renewable energy technologies and has deep understanding of battery degradation modes and the impact of the design and the usage profile of a battery on its durability, safety and lifetime. ACCURE uses cloud computing to improve the safety, reliability and lifetime of battery systems – from electric scooters, cars, busses and ships to stationary energy storage systems.



Within a joint research project planned for the next three years, the partners will combine their knowledge to adapt methods currently used under laboratory conditions to a highly scalable solution. Focus of the research activities is the adaptation of digital twins methodologies to

stochastic deployed systems. The goal is to gain a deep understanding of the aging mechanisms under various operation conditions such as load profile, ambient temperature and system design, and to use this knowledge to guarantee a safe operation and extend the battery lifetime.

The novel approaches will further push ACCURE's cutting-edge analytic methods and deliver additional insights into the aging processes of lithium-ion batteries without the need of expensive and time-consuming lab test studies.

### **About ACCURE**

ACCURE Battery Intelligence emerged from the largest European research group for battery systems at RWTH Aachen University. ACCURE combines cutting-edge research with a practical understanding of the industry's challenges to deploy, operate and recycle batteries safely and effectively. Today, almost 40 Battery Experts and data scientists collaborate through ACCURE's platform to support companies worldwide in making batteries safe, reliable, and sustainable. [www.accure.net](http://www.accure.net)

### **About HNEI**

The Hawai'i Natural Energy Institute (HNEI), a research unit of the School of Ocean and Earth Science and Technology (SOEST) at the University of Hawai'i at Mānoa (UHM), conducts research of state and national importance to develop, test, and evaluate novel renewable energy technologies. The Institute leverages its in-house work with public-private partnerships to demonstrate real-world operations and enable integration of emerging technologies into the energy mix. Founded in 1974, HNEI was established in statute in 2007 to address critical State energy needs. [www.hnei.hawaii.edu](http://www.hnei.hawaii.edu)

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