Center for Advanced Battery Technology

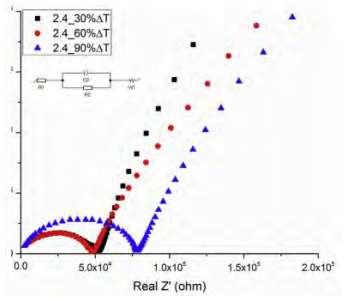
UNIVERSITY of NORTH TEXAS

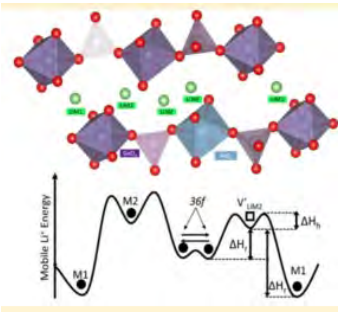
Wonbong Choi, MRS Fellow, NAI Fellow
Director, Center for Advanced Battery Technology
Associate Director, Advanced Materials & Manufacturing Processes Institute
Professor, Department of Materials Science & Engineering
University of North Texas

UNT UNIVERSITY OF NORTH TEXAS

Center for Advanced Battery Technology

The Center for Advanced Battery Technology (CABT) focuses on accelerating the development of the next generation of rechargeable batteries such as Li-S, Zn-ion, solid-state batteries and metal air batteries. The aim of CABT is to develop sustainable, high-performance batteries for the future and to make a decisive contribution to advancing battery cell production with the development of new active materials, electrodes, solid-state electrolyte and cells.





Center for Battery Technology

Advanced materials for rechargeable batteries Solid-state electrolyte

E-Storage Materials/ Ionic Solid Materials

Charge Transport & Interfaces

Design of Rechargeable Batteries & Manufacturing

Ion transport In-situ analysis Interface electro-chemistry

Collaboration: Industry, National Labs

Hunt Energy, ARK Power Tech
Oak Ridge Nat'l Lab
Sandia Nat'l Lab

Future Battery Technologies, Patents, K-12 program

Computation/Simulation Additive manufacturing Thermal management

Members

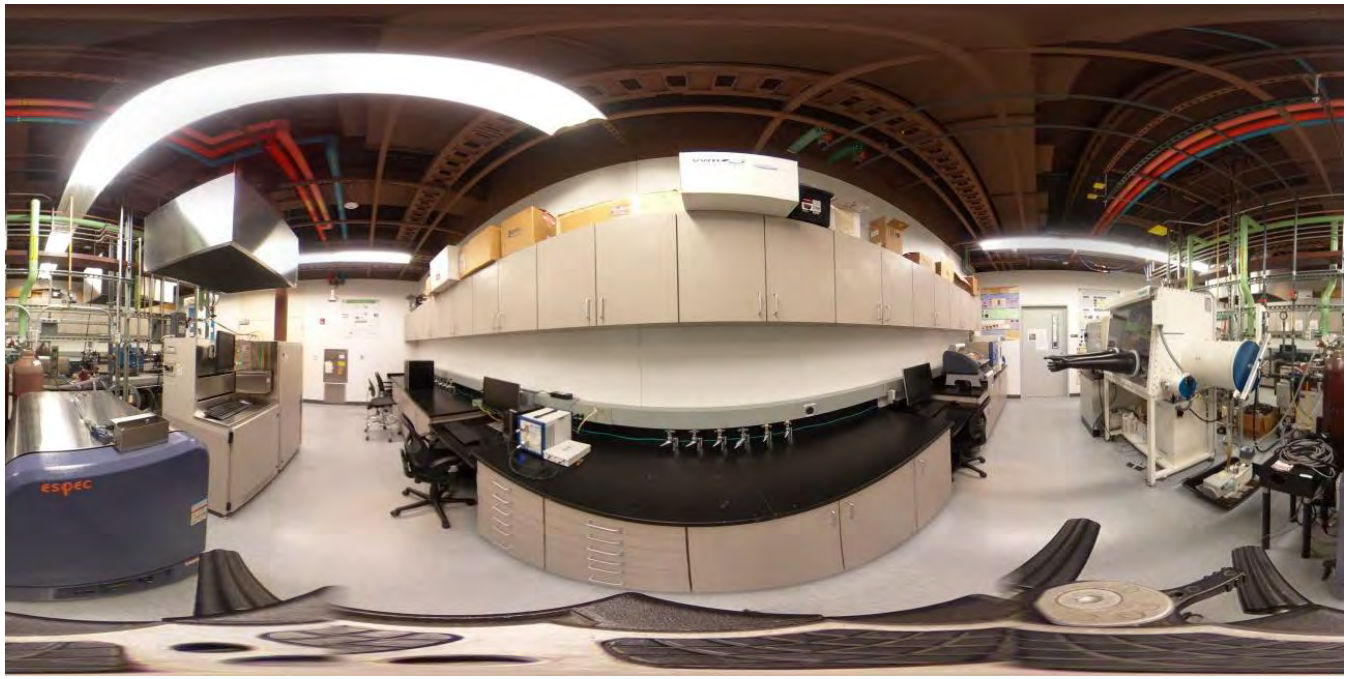
Prof. Wonbong Choi (PI), Prof. Jincheng Du (co-PI), Prof. Marcus Young (Material Sci. & Eng.)
Prof. Sheldon Shi, Prof. Vish Prasad (Mechanical Eng.)
Prof. Omary Mohammad (Chemistry)
Prof. King Man Siu (Electrical Engineering)

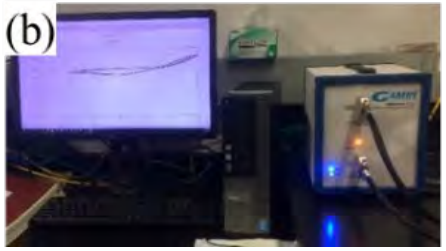
New Hiring in Batteries:
Research Prof. Eunho Cha (Material Sci. & Eng.)
Assistant Prof. John Wang (Material Sci. & Eng.)

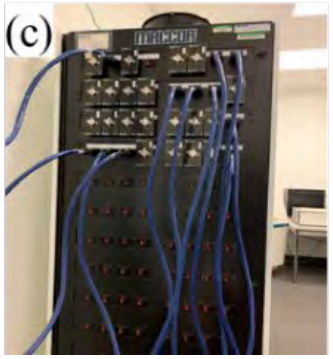
+Collaborating with **Center for Agile and Adaptive Additive Manufacturing (CAAAM)**
+Collaborating with Shenquing Ma Group (Chemistry) on CO_2 capturing for CO_2 batteries

UNT
UNIVERSITY OF NORTH TEXAS

Equipment for Battery Research







Equipment for battery research (Dr. Choi's lab): (a) Glove Box; (b) Electrochemical Workstation (GAMRY); (c) Battery Tester (MACCOR, 32 channels); (d) Battery tester with temperature control oven; (e) 4-Probe Station.