

# Hitachi HF-3300 TEM-STEM

## Techniques/Capabilities:

- 100kV and 300kV operation
- Cold FEG
- Bruker SDD-EDS and Spectrum Imaging
- Gatan Quantum 953 EELS/GIF
- Dual Bi-prism Assembly for Electron Holography
- SEM, BF-STEM, and HAADF-STEM Detectors
- High-Resolution TEM Imaging ( $\sim 0.12\text{nm}$ )
- Remote Access
- Heating Holder (Protochips -  $1000^\circ\text{C}$ )
- Gatan CT3500 Cryo-Transfer Holder
- Hitachi  $360^\circ$  Rotation Micro-Pillar Tomography Holder
- Hummingbird Scientific Liquid Flow Holder

## Current Research Activities:

- Catalyst nanoparticle imaging and analysis
- Carbon nanotube/nanohorn characterization
- Li-ion battery research and in-situ testing
- Fuel cell materials research
- Thermoelectric materials research

Contact: Karren More, [morekl1@ornl.gov](mailto:morekl1@ornl.gov), (865) 574-7788

