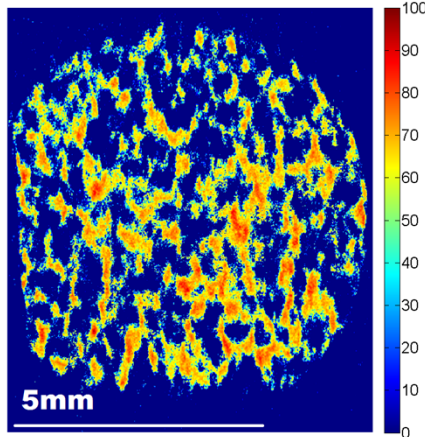
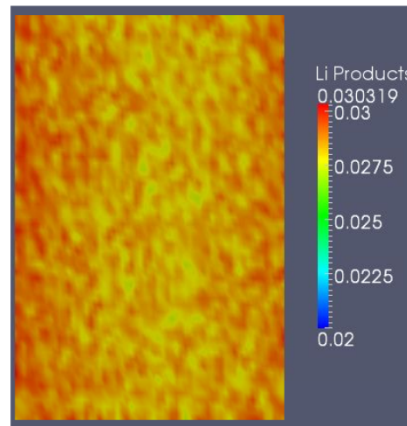


Neutron imaging Product Distribution in Li-Air Cathodes

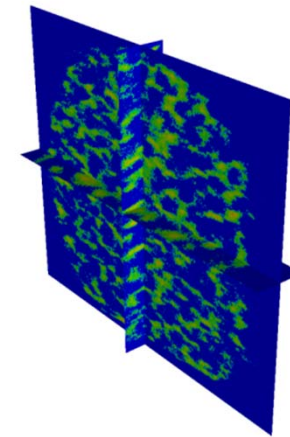
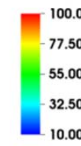
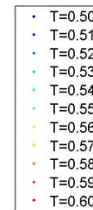
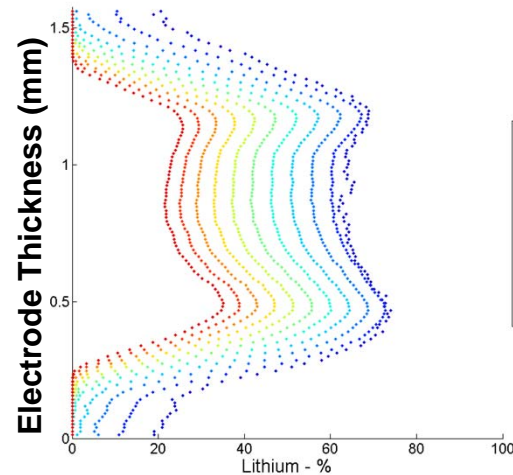
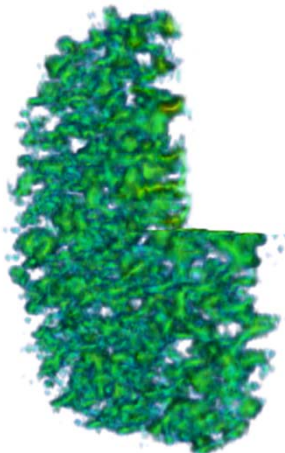
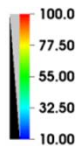
Neutron Imaging
Li-air cathode



3D Modeling
Li-air Cathode



- Neutron imaging shows a non-uniform lithium product distribution across the electrode.
- Non-uniformity driven by complex charge transfer kinetics and electronic passivation.
- Spatio-temporal reaction phase 3D modeling predicts nonuniform Li-product distribution confirming neutron results.
- Enables understanding the mechanism of discharge product formation in lithium-air cells



3D Neutron Tomography **Lithium Concentration Profile**

Lithium Concentration Cross Section