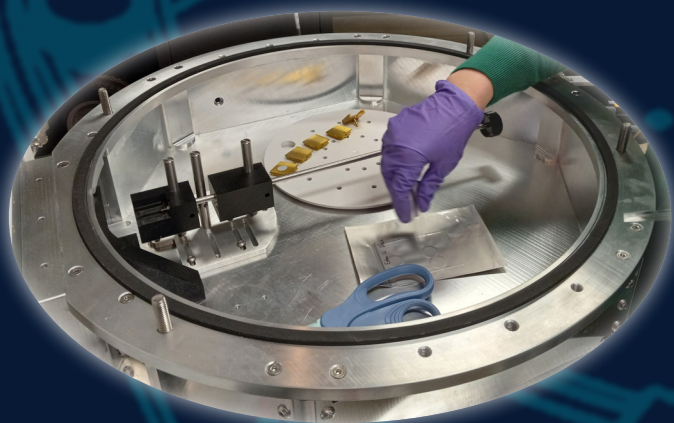


## FEATURES:

- TRANSPARENT, AIRTIGHT DOME WITH GLOVES FOR SAMPLE MANIPULATION
- INLET VALVES FOR INTRODUCING GAS
- PRESSURE GAUGE & RELIEF VALVE
- BLUETOOTH CONNECTED OXYGEN & MOISTURE SENSORS
- AIRTIGHT CHAMBER WITH ROOM FOR PREP, TOOLS, TRANSFER SYSTEMS, & OTHER ACCESSORIES
- ROTATABLE TOP FOR VARIABLE ORIENTATION OF OPERATOR'S STATION
- MODIFIED ARGON VENTING SYSTEM FOR THE SEM/FIB



## APPLICATIONS:

- BATTERY RESEARCH
- ANALYSIS OF HIGHLY REACTIVE & AIR-SENSITIVE MATERIALS (E.G. Li OR Na)
- HAZARDOUS MATERIALS HANDLING
- ENVIRONMENTAL SIMULATION STUDIES
- STERILE SAMPLE INVESTIGATIONS



## THE ONLY GLOVEBOX LOAD-LOCK FOR ELECTRON MICROSCOPY

*An innovative solution for loading  
air-sensitive materials, eliminating  
the need for an intermediary  
device to transfer samples between  
instruments*



THE NOBLE DOME WAS  
INVENTED & PROTOTYPED AT  
THE CENTER FOR ADVANCED  
MATERIALS CHARACTERIZATION  
OREGON, UNIVERSITY OF  
OREGON WITH A PATENT  
PENDING



C A M C © ®

# UNLOCK

## AIR-FREE TRANSFER SYSTEM

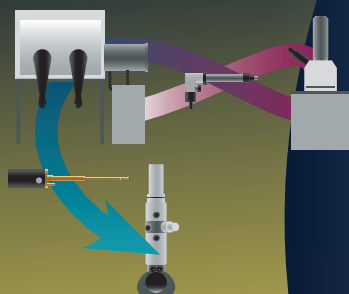
# NOBLE DOME

TRADITIONAL LOADING PROCEDURES EXPOSE SAMPLES TO ATMOSPHERE DURING TRANSFER, THE NOBLE DOME PRESERVES THE INTEGRITY OF AIR-SENSITIVE MATERIALS BY TRANSFERRING THEM IN AND OUT OF AN INSTRUMENT IN AN OXYGEN-FREE ENVIRONMENT

## SIMPLIFY YOUR WORKFLOW

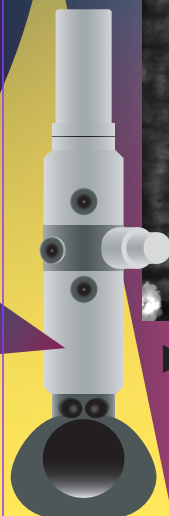
### CONVENTIONAL METHOD

COMPLICATED WITH MULTIPLE DEVICES & A STANDALONE GLOVEBOX



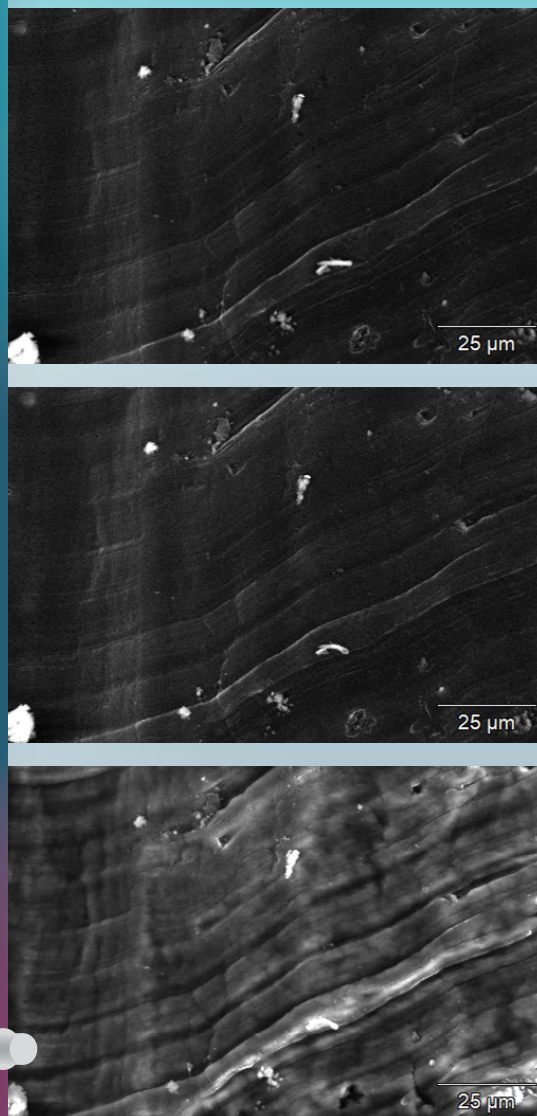
### NOBLE DOME APPROACH

LOAD SAMPLES DIRECTLY ONTO TEM HOLDER FROM THE SEM/FIB



## LITHIUM METAL OXIDATION EXPERIMENT

### SEM IMAGES

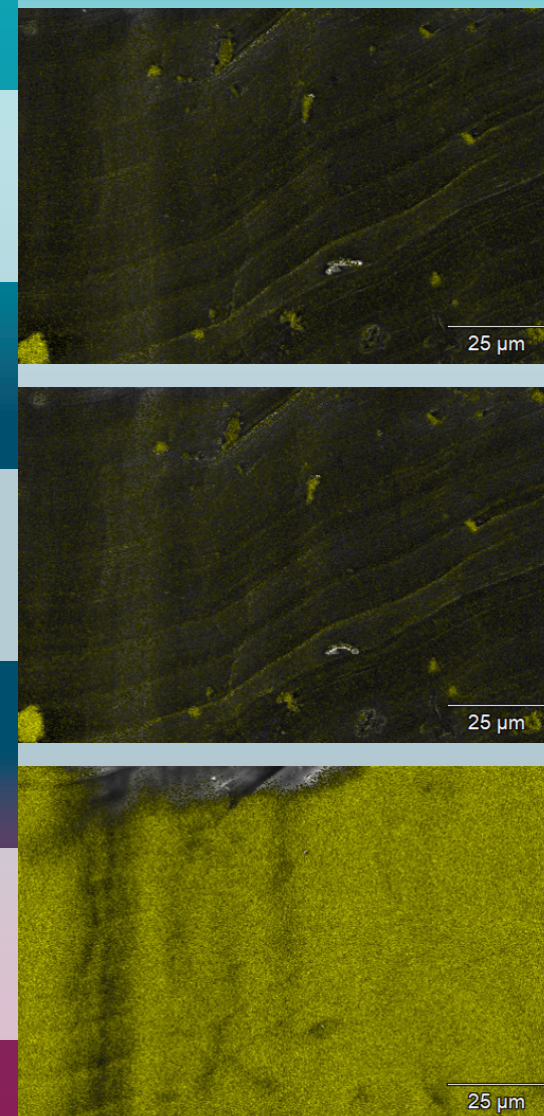


► VERY LITTLE CHANGE SEEN IN SURFACE TOPOGRAPHY & OXYGEN COUNTS BETWEEN SAMPLE IN ITS PRISTINE STATE & AFTER BEING IN NOBLE DOME

The same location on a lithium metal sample was imaged & analyzed with EDS in its pristine state, after 30 minutes in an argon environment in Noble Dome, & after 30 minutes in atmosphere

### OXYGEN EDS MAPS

each yellow pixel represents one count



► NOTABLE INCREASE IN SURFACE OXIDATION & TOPOGRAPHY SEEN ON SAMPLE AFTER SITTING IN ATMOSPHERE

PRISTINE SAMPLE

30 MINUTES IN NOBLE DOME

30 MINUTES IN AIR