

Gas cell TEM sample holder training class agenda

Training classes are available for new users or those who want to refresh their skills. Hummingbird Scientific's application scientists are ready to assist you to support your research. Meet our team and visit our design studio and manufacturing facility. Two-day classes include training on:

- How to use the gas cell TEM sample holder. Know the different parts of the sample holder required to perform in-situ gas TEM experiments, including gas and electrical connections.
- Assembling and disassembling MEMS-chips gas environmental cells. Know the different types of chips that we have (spacer, heater, and window MEMS chips) and learn how to put together environmental cells.
- Gas delivery controller & software. Learn how to inject gases at different pressures to your sample and purge the gas line with our software.
- Heating controller & software. Learn how to heat your sample at different temperature with our software.
- Function of leak checking station. Get hands-on experience with our leak checking station and learn how to operate it—allowing you to safely use the sample holder in the TEM.
- Liquid cell TEM best practices. Make the most of your equipment by doing real experiment in our lab.

DAY 1

8:00 am – 9:00 am

Welcome & introduction to in-situ gas cell TEM

9:00 am – 11:00 am

Hands-on instruction and practice in assembling and disassembling gas cell

11:00 am – Noon

Connecting gas lines to the holder

Noon – 1:00 pm

Lunch

1:00 pm – 2:00 pm

Gas delivery controller & software setup and operation

2:00 pm – 4:00 pm

Leak checking assembled cell and getting it ready for the TEM

4:00 pm – 6:00 pm

Gas cell TEM sample holder in TEM with demo heating experiment – discussion of imaging best-practices

Dinner

DAY 2

8:00 am – 9:00 am

Facility tour

9:00 am – 10:00 am

Heating controller & software setup and operation

11:00 am – Noon

Hands-on cleaning procedures training and setting up the next experiment

Noon – 1:00 pm

Lunch

1:00 pm – 4:00 pm

Hands-on experiments and discussion of best-practice imaging

4:00 pm – 5:00 pm

Wrap up and walkthrough to Hummingbird's webstore
