

On The Scope – A Masterclass in Practical Scanning Electron Microscopy

Component #1 (online or in-person):

	<i>Monday, 5/1/23</i>	<i>Tuesday, 5/2/23</i>
8:30 – 10:00AM	Registration	High Resolution Imaging
10:00 - 10:30AM	Registration	Coffee break
10:30AM - Noon	Welcome and intro to SEM	Non-conductive Sample Imaging
Noon – 1:00PM	Lunch Break	Lunch Break
1:00 - 2:30PM	Sample preparation	Energy Dispersive X-ray Spectroscopy (EDS)
2:30 – 3:00PM	Coffee break	Coffee break
3:00 - 4:30PM	Electron Sources and Probe Formation	Advanced EDS
4:30 – 5:00PM	Break	Break
5:00 – 6:30PM	Detectors in the SEM	Intro to EBSD
6:30 – 7:30PM		Social Hour

	<i>*Wednesday, 5/3/23: Digital Theater</i>	<i>*Wednesday, 5/3/23: Conference Room</i>
8:30 – 10:30AM	Materials Defect Characterization	EDS Data Simulation and Analysis
10:30 – 11:00AM	Coffee break	Coffee break
11:00AM - Noon	STEM in SEM	In-situ SEM
Noon – 1:00PM	Lunch Break	Lunch Break
1:00-2:00PM	Large Area Imaging	EBSD Data Analysis
2:00 – 3:00PM	Cathodoluminescence	EBSD Data Analysis
3:00-3:30PM	Coffee break	Coffee break
3:30 - 5:30PM	Metallography/fractography	Image Analysis

*Participants will choose which Wednesday session they would like to attend, as both sessions occur simultaneously. Sessions will be recorded for attendees.

Component #2 (in-person):

	<i>Lab Day 1: 5/5/23 OR 5/9/23</i>	<i>Lab Day 2: 5/6/23 OR 5/10/23</i>
8:00 – 10:00AM	Basic Imaging	Elective Lab
10:00 - 10:30AM	Coffee break	Coffee break
10:30AM - 12:30PM	Alignments	Elective Lab
12:30 - 1:30PM	Lunch Break/Optional CEMAS Tour	Lunch Break
1:30 - 3:30PM	Advanced Modes or EDS	Elective Lab
3:30 – 4:00PM	Coffee break	Coffee break
4:00 – 6:00PM	Advanced Modes or EDS	Elective Lab

Elective lectures and labs will be polled after registration. For additional information, visit go.osu.edu.onthescope-sem.