

The DEPARTMENT OF
PHYSICS & ASTRONOMY
presents

SEM-ing Is Believing: Exploring Materials at the Microscale

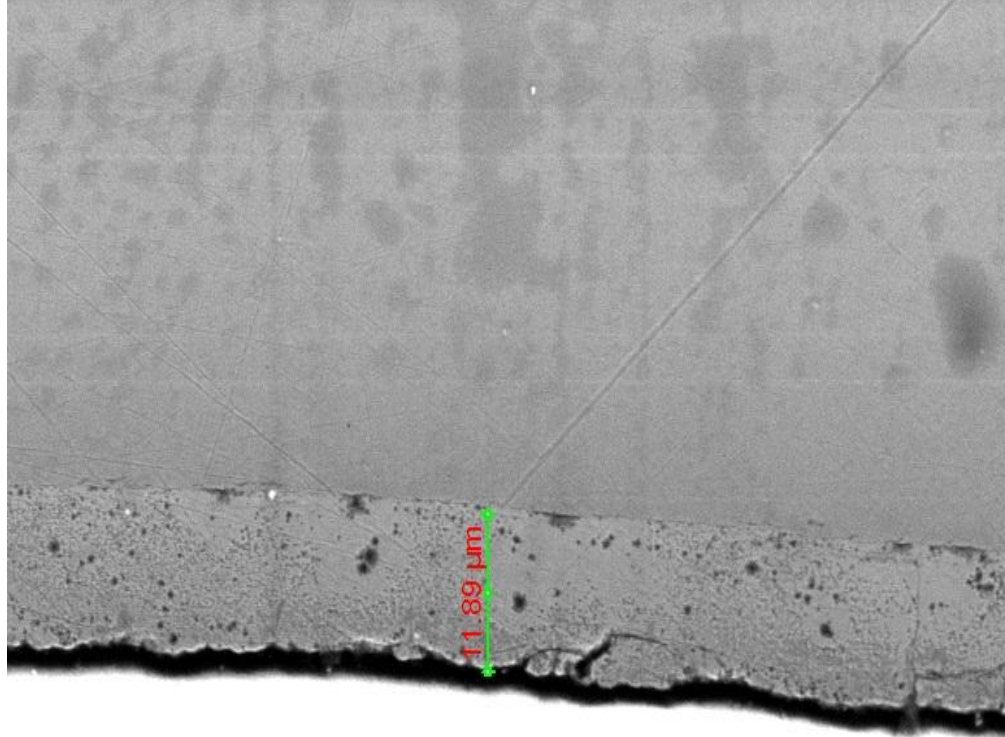
Wednesday,
January 28 2026
1:30 pm

Tracy Hall Science Center
Room 102



WEBER STATE
UNIVERSITY

College of Science



HV	det	HFW	mag	WD	spot	pressure	30 μm
10.00 kV	LFD	95.1 μm	2 178 x	10.9 mm	5.0	50 Pa	Quanta

Korbin Stacey

The scanning electron microscope (SEM) is an essential tool for students interested in laboratory-based research, providing the ability to image and analyze materials at the microscale using a focused electron beam. This seminar introduces the fundamental operating principles of the SEM and common applications of SEM across multiple disciplines. The seminar also presents undergraduate research projects that I contributed to and conducted using SEM, highlighting its role in the analysis of real materials and geological samples. These examples demonstrate how the SEM connects theoretical concepts to experimental practice and emphasize the importance of hands-on microscopy experience in scientific research.