WORKSHOP #10

Electron Backscattered Diffraction (EBSD) Tutorial: Fundamentals, Basic Data Acquisition and Analysis

Fernando Camino (BNL), Richard McLaughlin (Oxford Instruments) and Glenn Kinnear (Oxford Instruments)

Electron Backscattered Diffraction (EBSD) is a useful SEM-based technique for obtaining crystallographic information of samples. CFN's new FIB (Helios G5) is equipped with an Oxford Instruments Symmetry EBSD detector running AztecCrystal analysis software. Participants in the workshop will be introduced to the EBSD technique and will gain practical knowledge to prepare the EBSD detector, the sample, and operate the EBSD software to obtain data and perform basic data analysis.

May 25, 2022

Start Time (ET)	Title	Speaker (Affiliation)
1:00-3 PM*	Introduction to EBSD: Science and potential	Michael Hjelmstad
	applications	Oxford Instruments
3:00-3:05 PM*	Vendor Flash Talk	
3:05-3:20 PM*	Coffee Break	
3:20-5:00 PM*	Detector Fundamentals, Process flow for EBSD.	
	Explanation of Sample preparation required for	Michael Hjelmstad
	EBSD. Introduction of Aztec software for EBSD	Oxford Instruments
	acquisition and setting up detector	
5:00 PM*	Workshop adjourns to resume next day	

May 26, 2022

Start Time (ET)	Title	Speaker (Affiliation)
1:00-3 PM*	Data Acquisition using Aztec and introduction to	Michael Hjelmstad
	AZtecCrystal for post-processing	Oxford Instruments
3:00-3:05 PM*	Vendor Flash Talk	
3:05-3:20 PM*	Coffee Break	
3:20-5:00 PM*	Using AZtecCrystal for routine and complex post-	Michael Hjelmstad
	processing	Oxford Instruments
5:00 PM*	Workshop adjourns	

^{*} All times are (UTC-5) Eastern Time (USA and Canada)