SPRING 2023

MSE 690 SEMINAR SERIES

MONDAY, FEBRUARY 13TH | 3:30 REFRESHMENTS | 3:45PM SEMINAR

ARMS 1010

PETER CLIFTON

Global Product Sales Leader for APT

CAMECA

"Applications seminar on Atom Probe Tomography for 3D Atomic-Scale Characterization"

Abstract: Atom Probe Tomography (APT) is the highest spatial resolution analytical characterization technique with high efficiency single atom detection for quantitative atom scale 3D compositional analysis and elemental mapping of chemical heterogeneities. This talk will cover APT operational theory, an introduction to sample prep and data reconstruction, and an overview of various applications. A commercial cryo-UHV solution for FIB-APT specimen transfer will also be presented which expands the application space for APT to hydrogen containing materials and surfaces prone to rapid oxidation.

Biography: Peter Clifton has fulfilled a variety of technical and commercial roles and is currently Global Product Sales Leader for APT at CAMECA. He has been working with the atom probe technique for nearly 20 years including time as a research assistant within the Oxford Materials Department Atom Probe Group (working with Profs. Alfred Cerezo and George Smith) and as well as multiple engineering and scientific roles with Seagate Technology, ONS, Imago and CAMECA. Peter read Physics at the University of Birmingham (UK) and gained his doctorate degree studying the interfaces between diamond and metal thin films using a variety of surface science methods. He has presented invited talks and papers at a wide variety of international conferences, seminars and workshops and has published more than 50 APT-related papers.

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