

# Atom Probe Tomography

## Frontiers in Chemical Imaging Seminar Series



Presented by...

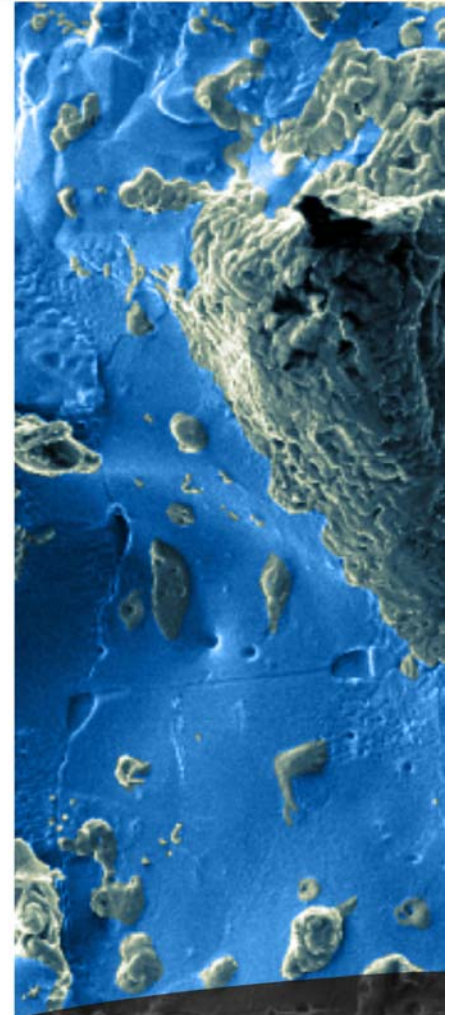
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### Abstract

A brief overview of the history of the atom probe tomography (APT) technique and instruments will be presented, from the early field ion microscopy experiments in which images of individual atoms were obtained for the first time to the present state-of-the-art local electrode atom probe in which atomic resolution data sets containing billions of atoms can be obtained. Examples of the types of analyses that may be performed with this technique, including solute segregation to dislocations, interfaces, and grain boundaries, and the characterization of fine-scale precipitates in complex alloys, will be shown. A summary of APT characterizations of creep resistant and radiation tolerant nanostructured ferritic steels will be presented.

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**Date: March 4**

**Location: EMSL  
Boardroom**

**Time: 10:00am**