

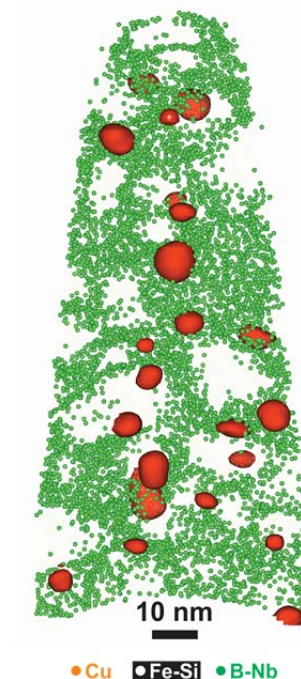
Atom Probe Tomography

Atom probe tomography is a unique characterization technique that facilitates three-dimensional visualization as well as in-depth analysis of nano-scale features at near-atomic scale resolution. The advent of Local Electrode Atom Probe (LEAP) has revolutionized the field with materials of all types ranging from metallic, ceramic, semi-conducting as well as biological materials are being successfully investigated. This workshop provides a platform where the basics of atom probe will be introduced to the new-comers and the recent advances in atomic scale microscopy will be provided to the experienced users.

Workshop on 3D Atom Probe Tomography

20 July 2017,

Indian Institute of Technology Madras, Chennai



Supported by CAMECA - USA

Program details

Morning session:

9:00 – 9:30: Dr. Peter Clifton (CAMECA - USA):

Recent trends in atom probe tomography – Design and operation of LEAP

9:30 – 11:00: Dr. K.G. Pradeep (RWTH Aachen University, Germany):

Introduction to basics of atom probe tomography – Application to materials characterization

11:00 – 11:30: Tea Break

11:30 – 12:00: Prof. B.S. Murty (IIT Madras, India):

Characterization of multi-component high entropy alloys using atom probe tomography

12:00 – 12:30: Dr. Satyanarayana V N T Kuchibhatla (Gitam University, India):

Advanced interface analysis and high resolution depth profiling of atom probe data

12:30 – 13:00: Dr. R. Gopalan (ARCI Chennai, India):

Atomic scale characterization of magnetic materials

13:00 – 14:00: Lunch

Afternoon session:

14:00 – 17:00: Live demonstration and operation of LEAP

Key Offerings

- Basics of atom probe tomography
- Basics of sample preparation
- Live demonstration of the operation of local electrode atom probe tomography
- First-hand experience on the analysis methods

Participants

- Scientists
- Professionals from R&D laboratories
- Students (Post graduate and PhD)

Contact person

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