Joint ICTP-IAEA Advanced Workshop on High Sensitivity 2D & 3D Characterisation and Imaging with Ion Beams | (smr 2856)

Contribution ID: 14 Type: not specified

Secondary Ion Mass Spectroscopy - SIMS, Cluster-SIMS and MeV-SIMS

Wednesday, 28 September 2016 11:00 (1:00)

Content

The basic concepts behind SIMS will be provided. The underlying models of the molecular and ion ejection process will be given. The similarities and differences between MeV-SIMS and the more conventional cluster keV-SIMS will be given. Simulations of molecular ejection from molecular material due to deposited energy spikes will be used to demonstrate the underlying physical mechanisms behind the MeV and cluster keV-SIMS process. A description of what can be expected to be achieved from MeV-SIMS and cluster SIMS and their position in the great collection of materials analysis techniques in existence today. Comparison is made with other molecular concentration mapping techniques.

Summary

Presenter(s): WEBB, Roger (University of Surrey, Guildford, UK)

Session Classification: DAY 3