

The 149th MANA Special Seminar



Some New Directions in Photoemission: Characterization of Buried Layers, Interfaces, and Complex Bulk Materials with Standing Waves and Hard X-Rays

Chair: Dr. Masakazu Aono (MANA Director-General)

Prof. Charles S. Fadley

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I will discuss some new directions in soft and hard x-ray photoemission, including the use of standing-wave excitation for the study of buried layers and interfaces, the extension of angle-resolved photoemission into the hard x-ray regime, and the potential uses of hard x-ray photoelectron diffraction for studying bulk atomic structure in complex materials. Some first-of-a-kind experimental data in each of these areas will be discussed, together with appropriate theory. Example application materials for these methods will be multilayer structures of relevance to spintronics, metals, semiconductors, and Heusler alloys.

Acknowledgements and References:

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Venue: 4th Floor, Large Seminar room, Collaborative Research Bldg.

Date: June 17th Thu. **Time:** 15:30-16:15

Contact: International Center for Materials Nanoarchitectonics (MANA), Nakata (ex. 8806)

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