

Arizona State University

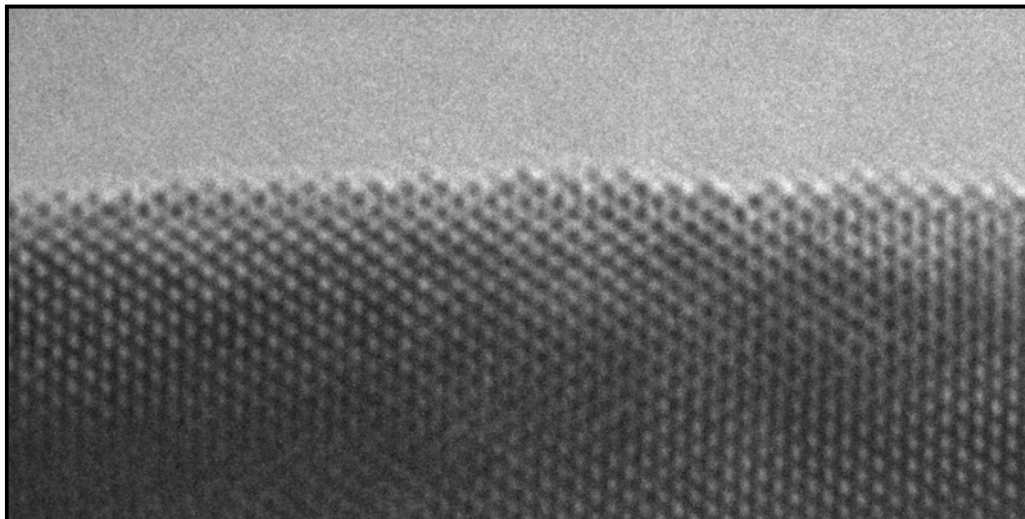
The LeRoy Eyring Center for Solid State Science

Winter School on High Resolution

Electron Microscopy

Held at the
John M. Cowley Center for High Resolution
Electron Microscopy

January 12 - 16, 2009



Sponsors

LeRoy Eyring Center for Solid State Science
FEI Company
JEOL USA Inc.

Schedule

Monday

8:30 Registration (PSF 101)

8:50 Introduction – **Peter A. Crozier** (PSF 101)

9:00 Introduction to Transmission Electron Microscopy (TEM) – **Peter A. Crozier** (PSF 101)

9:50 Theory and Practice Electron Diffraction – **Jian-Min Zuo** (PSF 101)

10:40 Break

11:10 Introduction to Labs – **Peter A. Crozier** (PSF 101)

11:50 Lunch

1:00 Lab (see lab schedule)

3:00 Break

3:20 Lab (see lab schedule)

Tuesday

9:00 Imaging Theory and Contrast Transfer Functions – **Mike J. Treacy** (PSF 101)

9:50 Theory and Practice of HREM – **Mike J. Treacy** (PSF 101)

10:40 Break

11:00 Image Interpretation and Simulation – **Renu Sharma** (PSF 101)

11:50 Lunch

1:00 Lab (see lab schedule)

3:00 Break

3:20 Lab (see lab schedule)

6:30 Winter School Dinner at Macayo's Restaurant, Downtown Tempe

Wednesday

9:00 Introduction to STEM – **Peter A. Crozier** (PSF 101)

9:50 Theory and Practice of STEM – **Jingyue Liu** (PSF 101)

10:40 Break

11:00 Electron Energy-Loss Spectroscopy and Nanoanalysis – **Rolf Erni**

11:50 Lunch

1:00 Lab (see lab schedule)

3:00 Break

3:20 Lab (see lab schedule)

Thursday

9:00 Energy Dispersive X-ray Spectroscopy and Nanoanalysis – **Masashi Watanabe** (PSF 101)

9:50 Applications to Materials – **Moon J. Kim** (PSF 101)

10:40 Break

11:00 TEM Sample Preparation and Focused Ion Beams – **Lucille Giannuzzi** (PSF 101)

11:50 Lunch

1:00 Lab (see lab schedule)

3:00 Break

3:20 Lab (see lab schedule)

Friday Morning

Demonstrations

Focused Ion Beam

Specimen Preparation

In Situ TEM

Others available on request

1:00 Close