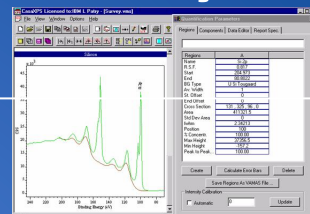# January 23 – 24, 2018 (1.5 Day Course)
Birck Nanotechnology Center Rm1001 • 9:00am

Introduction to CasaXPS

What we should know about XPS data analysis with CasaXPS

Course Objectives:
Learn the CasaXPS software and:
- What analysis/treatment should be applied to raw XPS data.
- How to perform qualitative and quantitative analysis of the XPS data using CasaXPS
- Case studies based on participant's XPS data

Course Description:
XPS is widely used to determine the chemical composition of a surface (element concentrations, chemical states, lateral and depth distributions, etc.) Nowadays XPS has become a standard technique for the characterization of solid surface. However, XPS data require thorough analysis, and dedicated software is used for data analysis. Purdue University has a site license for CasaXPS allowing complete analysis of XPS data. The course aims to teach (1) what analysis should be applied to raw XPS data and (2) how this can be done using CasaXPS. Qualitative and quantitative analysis of XPS data using CasaXPS will be discussed in detail as well.

Day 1 (Jan. 23 @9:00am-4:00pm):
Basic of CasaXPS: Loading and displaying data, selecting and zooming data, etc.
Processing Spectra: Charge correction and energy calibration
Quantification of Spectra: Creating background and regions. Quantification of survey and high-resolution spectra using regions, creating peak models, creating reports.
Result Transfer to other media: export txt data, graphics files, etc.

Day 2 (Jan. 24 @9:00am-1:00pm):
Case studies: Analysis of participant's XPS data

Participants are encouraged to bring their own laptops to follow data analysis using CasaXPS.

Audience:
The lecture is orientated at a general audience. Scientists, engineers, students and technicians who would like a detailed understanding for the use of XPS/ESCA for surface analysis.
Ideally every group planning to do XPS analysis should have at least one designated student familiar with how to analyze XPS data.

Instructor:
Dmitry Zemlyanov,
PhD, Senior Surface Science Application Scientist, Birck Nanotechnology Center, Purdue University

Registration at: http://bit.ly/IYeOeu

Total 1.5 – Day Cost: $250 (lunch on the first day will be provided)

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Discovery Park