DIFFRAC^{plus} TOPAS

Spotlight Series Software Training



Course Description:

This course applies to users who are familiar with using an X-ray diffractometer and puts the spotlight on TOPAS.

Participants should have basic knowledge of powder X-ray diffraction. This course applies to diffractometer users who are already familiar with TOPAS software and profile fitting techniques, but want more in-depth training. To get the most out of this course, please bring datasets from your instrument for hands-on practice and one-on-one assistance. Attendees will have a computer with TOPAS software installed available for hands-on participation. (Their own or one will be provided.)

Recommended Prerequisite:

- 4-day XRD New System Applications Training class in Madison, WI or
- 2-day XRD On-site Training

Course Instructors: Dr. Holger Cordes

Sr. Applications Scientist

Bruker AXS Inc. +1 608-276-3048

holger.cordes@bruker-axs.com

Dr. Nattamai Bhuvanesh

Assistant Manager, X-ray Laboratory

Texas A&M University +1 979-845-8290

nbhuv@mail.chem.tamu.edu

Course Outline & Agenda:

Day 1 9 am – 5 pm

- Introduction to TOPAS software
 - Sample Preparation Tips and Tricks
 - Peak Profile Fitting
 - Reitveld Refinement Basics and Quantitative
- Ab-initio Structure Determination: Indexing

Day 2

9 am - 5 pm

- Analysis and Hands-on: Quantitative Analysis
- Ab-initio Structure Determination: Charge Flipping
- Ab-initio Structure Determination & Simulated Annealing
- Individual training with exercises at the computer