**Instructors:**
Grant Bunker (IIT), Amani Ebrahim (SBU), Anatoly Frenkel (SBU/BNL), Joshua Kas (UW), Shelly Kelly (ANL), Yuanyuan Li (SBU), Yang Liu (SBU), Nicholas Marcella (SBU), David Sprouster (SBU), Fernando Vila (UW)

Pre-requisite (self-study):
Synchrotron sources, detectors – G. Bunker (Link will be provided)

**November 17 (Wednesday)**

**Part 1. Lectures:**
9am: Introduction - A. Frenkel  
9:30 am Introduction and overview of XAFS – A. Frenkel  
10:30 am Sample preparation- G. Bunker.  
11:30-12 pm Break  
12pm Theory and calculation of X-ray spectra with FEFF – J. Kas  
1:30-2:30 pm Break  
2:30 pm Concepts of EXAFS data analysis– G. Bunker

**Part 2. XAFS Fundamentals: Questions and Answers**
3:30-5 pm Questions that come in real time or prepared in advance. Questions may include discussing a particular project or structure or experimental planning. Main room. All instructors.

**November 18 (Thursday)**

**Part 1. Lectures:**
9 am XANES data analysis with FEFF (demo)– F. Vila  
10 am XAFS data processing with Demeter/Athena: S. Kelly  
11-11:30 am Break  
11-12 pm EXAFS data analysis with Demeter/Artemis: S. Kelly  
1-2 pm Break  
2-3:30 pm Application of XAFS to catalysts – A. Frenkel

**Part 2. Problem solving strategies: Questions and Answers**
3:30-5 pm Questions that come in real time or prepared in advance. Questions may include discussing a particular project, structure, data, analysis strategy. Main room. All instructors.

**November 19 (Friday)**

Solving open ended problems/projects/ proposed by instructors and/or participants. Breakout rooms, up to 8 participants per room, organized according to the topic (XANES modeling or EXAFS analysis), moderated by all instructors.
9-9:30 am Setup of breakout rooms
9:30-11 am Breakouts
Break
11:30-1 pm Breakouts
Break
2-3:00 pm Breakouts
Break
3:30-5 pm Breakouts
5 pm: Adjourn