

X-ray Practicals Room 2121 August 24-28 2009

Instructor: Joseph Reibenspies Ph.D.

Synopsis. This course is intended to teach students how to use the X-ray diffraction instrumentation available in the department.

See www.chem.tamu.edu/xray/courses.shtml for details, class notes and data.

The XSEED tutorials is part of a LAPTOP university course. Students are encouraged to download the programs to their laptops and bring the laptops to class.

The XSEED program can be downloaded from <http://x-seed.net/> and will run without registration for the first 30 sessions. Be sure to download POVRAY (<http://www.povray.org/download/>).

The data for both sessions is at www.chem.tamu.edu/xray/courses.shtml. Please follow the Examples link.

WINGX download (not required, but useful)

<http://www.chem.gla.ac.uk/~louis/software/wingx/>

All programs should be fully functional at the time of the class. The instructor cannot spend class time setting up computers.

Dates : August 24, 25, 26, 27,28 Time : 12:30 Room 2121.
Instructor : Joseph Reibenspies

Syllabus:

August 24: XRD introduction
12:30 – 1:30

August 25: Data Collection and Data Reduction
Beginners: 12:30-1:30
Advanced Techniques: 1:30-2:30

August 26: Absorption Correction and Initial Preparation (space group etc..)
Beginners: 12:30-1:30
Advanced Techniques: 1:30-2:30

August 27: Structure Solution and Refinement
XSEED tutorial 12:30-1:30
Bring your laptop with XSEED pre-installed
Advanced Structure Solution 1:30-2:30

August 28: Refinement techniques (disorder, absolute configuration etc..)
12:30-1:30
Structure Verification and Publication
1:30-2:30