

## **CHEMISTRY 273/279, Structural Inorganic Chemistry, Spring 2009**

**CHEM 273:** The use of x-ray and neutron scattering to characterize solid state materials. Subjects include the crystal unit cell, space groups, structure determination and refinement. It is recommended that the student have an elementary introduction to vectors, matrices, and Fourier series.

**CHEM 279:** The main objective of the course is to expose students to practical aspects of powder and single crystal x-ray diffraction, including the determination and refinement of crystal structures.

**CHEM 273** meets Tuesdays and Thursdays, 11:00 a.m. - 12:15 p.m., in BSIF 1217.

**CHEM 279** meets Wednesdays, noon - 2:00 p.m., in PSB-N 4606  
**and** as needed in PSB-N 4610.

### Instructors:

Prof. Galen D. Stucky, [stucky@chem.ucsb.edu](mailto:stucky@chem.ucsb.edu)  
office: 3623D Physical Sciences Building-North, telephone 893-4872  
office hours: Tuesdays after class: 12:15 - 1:15 p.m.

Dr. Guang Wu, [wu@chem.ucsb.edu](mailto:wu@chem.ucsb.edu)  
office: 4610 Physical Sciences Building-North, telephone 893-2399  
office hours: by appointment

### Reference:

*X-ray Structure Determination: A Practical Guide* (George H. Stout and Lyle H. Jensen)  
Other books will be on reserve for the course.

### Web resources

Course page: [www.chem.ucsb.edu/coursepages](http://www.chem.ucsb.edu/coursepages).

Homework assignments, copies of lectures, and announcements will be posted.

Useful crystallography sites:

- [www/cem.msu.edu/~ward/cs\\_links.html](http://www/cem.msu.edu/~ward/cs_links.html)
- [epswww.unm.edu/xrd/resources.htm](http://epswww.unm.edu/xrd/resources.htm)

### Grading

- Homework assignments
- Projects
- Final exam