

Attention!!!

Seniors and Graduate Students in Science/Engineering

The Chemistry Department will be offering a number of five week, one credit, “mini courses” during the academic year. These courses are designed to be “practical” introductions to a number of important topics and techniques in chemistry. If you are interested in any of the mini courses described below or if you wish more information, please email Connie at chemug@buffalo.edu giving your name, student number and in which course(s) you would be interested, and in which semester. We will then contact you concerning availability, times and places.

1. *Computation of NMR Parameters*: Basic theory and a practical guide to using state-of-the art software. (Dr. Autschbach)
2. *Biom mineralization*: Kinetics and mechanisms of crystal growth and dissolution of biological minerals: the importance of nano-particles. Chemistry of reactions at biomineral surfaces. (Dr. Nancollas)
3. *Basic Practical NMR Spectroscopy* (Dr. Sukumaran)
4. *Advanced Practical NMR Spectroscopy* (Dr. Sukumaran)
5. *Biophotonics* (Dr. Prasad)
6. *Computer Modeling of Biological Systems I, II and III* (Dr. Freindorf)
The course is an introduction to computational methods for molecular modeling of biological systems such as proteins and nucleic acids. The goal is to provide a general overview of computational quantum chemistry (Part I), molecular mechanics (Part II) and a combined QM/MM method (Part III) as applied to molecules of biological interest. Prerequisites for Part III are Part I and Part II.

Details on:

<http://www.ccr.buffalo.edu/display/~mfrein/Computer+Modeling+of+Biological+Systems>.

A syllabus for each course can be found at <http://www.chem.buffalo.edu> under "Chemistry Courses; Graduate Course List and Syllabi".