

Chemistry 235: Applications of NMR Spectroscopy

Dr. Stephen Lynch

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NMR room: Stauffer I, Room# 17A, 17B, 18A, 18B

Monday, Tuesday: 7:00 PM-8:30 PM

Textbook: High-Resolution NMR Techniques in Organic Chemistry-
Timothy Claridge

Other Books (on Reserve in Chemistry Library):

Modern NMR techniques for chemistry research: Andrew E. Derome

NMR spectroscopy : basic principles, concepts, and applications in
chemistry- Harald Günther

Nuclear Magnetic Resonance Spectroscopy: John Nelson

Lecture Notes will be available online on the NMR lab website:

<http://www.stanford.edu/group/chem-NMR/chem235.html>

Course Grades:

No Exams

60%: Data Acquisition, Processing, Assignment of Unknown Compound

40%: Problem Sets

Use of Chemistry Department NMR Facility will begin in week 2.

To be prepared for this portion of the course, you should familiarize yourself with VNMR software.

VNMR Software:

You should be able to acquire simple 1D data, process, and print the spectra, essentially the basic spectrometer operation taught by the NMR Teaching Assistants. If you do not have an account on any NMR instrument right now, you should get trained on the 300 MHz NMR. You **MUST** be able to use the 300 MHz NMR next week. Contact NMR TA:

Sushant Malhotra
Trost Group
3-1100
sushantm@stanford.edu

If he is unavailable, contact:

Matt Kieseewetter
Waymouth Group
Stauffer I 206
3-8029
isotope@stanford.edu

or

Brian DeCristopher
Wender Group
3-3898
Lokey 216
badechri@stanford.edu

In week 2 or 3, you **MUST** show me that you know how to use the 300 MHz NMR. There will be a class account for use of the instrument, at that time you are given an account name and password.