April 2007 Meeting

Date: April 23, 2007

Speaker: Dr. John Engen, Northeastern University

Topic: A place for hydrogen/deuterium exchange in the protein analysis universe

Time: 7:30 pm

Location:
University of Maryland-Baltimore County, Meyerhoff (Chemistry) Building Seminar Room (1st floor). Host: Professor Dan Fabris. Please park in metered spaces on roof of Administration garage. See directions for more details.

Dinner at 5:30 pm: Meet the co-chairs, Professor Dan Fabris and the speaker for dinner at the Ellicott Mills Brewing Company, Ellicott City, MD. Contact Dan Fabris if you plan to be there.

Abstract:

Mass spectrometry can be applied to a variety of analytical problems. One of the less utilized areas of mass spectrometry is the analysis of protein conformation and dynamics. By labeling protein molecules under physiological conditions, either covalently or non-covalently, information can be captured about their folded state. Hydrogen exchange methods non-covalently label the backbone amide hydrogens of proteins with deuterium and the location and magnitude of the labeling can then be determined with mass spectrometry. Several examples of the utility of hydrogen exchange methods will be shown for proteins related to cancer and AIDS.