

# Physical Chemistry Seminar

Tuesday,  
March 10, 2015

11:00 am

Room 1315  
Chemistry Building

## *Single-conformation spectroscopy: Probing H-bonded Networks in Peptides and Clusters*



Professor Timothy S. Zwier  
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Host: Professor Etienne Garand

Many of nature's most important processes are guided by networks of H-bonds, producing structures that reflect a delicate balance of competing attractive and repulsive forces. These structures are poised to fold and unfold, bind or unbind, react or resist reaction, based on energy differences that are a very minor fraction of their total energies. This talk will describe the use of double-resonance infrared and ultraviolet spectroscopy to probe networks of intramolecular and intermolecular H-bonds under isolated molecule and molecular cluster conditions, thereby directly interrogating them on a conformation-specific basis. Examples will be drawn from peptides, model lignin compounds, and water-containing clusters.

Refreshments will be available prior to the seminar at 10:45 a.m. outside room 1315

Graduate Students may meet with the speaker at 1:00 p.m. in Room 8305F