## b Institute for Basic Science

IBS Center for Molecular Spectroscopy and Dynamics

## Colloquium

SPEAKER

Prof. Casey H. Londergan (Associate Professor of Chemistry, Haverford College)

TITLE

Infrared and Raman solvatochromism and the development of new vibrational probe groups

ABSTRACT

Clear and systematic experiments are needed to document and to understand the environmental dependence of the frequencies and lineshapes of possible vibrational probe groups. This talk will discuss strategies for designing and interpreting experiments that apply either IR and/or Raman spectroscopy and other various nonlinear IR techniques to model compounds, simple peptides, or well-behaved proteins that contain vibrational probe functional groups. While many groups have performed vibrational solvatochromism experiments and many different functional groups have been examined, there is not a clear community consensus about either the best design for such experiments or the most appropriate approach to intepreting the data, and I will reflect on the challenges remaining in this area.

DATE AND VENUE

July 08, 2016 (Friday, 1:00-2:00 p.m.) Seminar room 116, R&D Center