**METABOLOMICS SEMINAR**

**Date:** Thursday, March 28, 2013  
**Time:** 9:30 am to 11:30 am  
**Place:** Room 115 Biomedical Research Tower

Metabolic Profiling by NMR: Applications to Human Disease and Food Products

*Presented by*

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**Abstract:** Metabolomics is a newly emerging area of ‘-omics’ research concerned with the comprehensive characterization of small molecule metabolites in biological systems. It has the promise to enable detection of disease states and their progression, therapeutic intervention, genetic modification or environmental variation based on metabolite profiles. Nuclear Magnetic Resonance (NMR) Spectroscopy is a powerful tool for metabolic profiling studies because it provides reproducible information-rich data for metabolomics studies. This talk will focus on the application of metabolomics by NMR spectroscopy from human health to food science and microbial systems, and raise practical issues for conducting successful metabolic profiling studies. Recent studies of bio-fluids and tissue samples from different organisms will be highlighted to show the importance of metabolic studies by NMR. In addition, application of NMR in beverage and herbal products in terms of product optimization and quality control will be covered.

**CAMPUS CHEMICAL INSTRUMENT CENTER NMR FACILITY (CCIC NMR)**

This seminar is hosted by the Campus Chemical Instrument Center (CCIC) NMR facility. The CCIC NMR plans to bring this new capability ‘Metabolomics by NMR’ to the facility to support campus-wide OSU researchers. We strongly encourage you to attend the seminar to know more about NMR technology and its wide application in metabolomics.