

Departmental Seminar Announcement

The Dynamics of Phosphorus Cycling in Florida Lake Sediments

Melanie J. Beazley, Ph.D.
Assistant Professor
Department of Chemistry
University of Central Florida

Understanding the fate and transport of contaminants from urban runoff in environmental surface waters and sediments is paramount to developing mitigation strategies to protect fragile drinking water sources. The Florida aquifer system is the primary drinking water source for Florida and southern Georgia, and due to naturally porous soils, limestone geology, and abundant rainfall the aquifer is particularly vulnerable to contamination from surface lakes and groundwater recharge. External loading of excess nutrients such as nitrogen and phosphorus to lakes from runoff leads to toxic algal blooms, eutrophication, and lake impairment. The cycling of phosphorus in surface lakes and sediments is considered one of the key factors that influence lake productivity and water quality. This seminar will examine phosphorus speciation in a Central Florida lake, with particular interest in the role of sediments in phosphorus internal loading to the overlying water column. Seasonal distributions of dissolved oxygen concentrations and redox conditions coupled with the reductive dissolution of iron oxyhydroxides will be discussed as possible controls on phosphorus release from sediments.

Date: Friday, March 10, 2017

Time: 11:00 am to 12:00 pm

Location: PG5 - 153 MMC (Live)

Marine Sciences Building Room 105 (MSB-105) – BBC (via Polycom)



**FLORIDA
INTERNATIONAL
UNIVERSITY**

Phone: 305-348-2605

Fax: 305-348-6700

E-mail: chemistry@fiu.edu

<http://chemistry.fiu.edu>