



12th International Symposium on Biogeochemistry of Wetlands

Protecting the **Future of Water**

April 23-26, 2018 | Coral Springs, Florida, USA

Session #23

Assessment of Contaminant Removal and Retention in
Wetland Sediments

Organizer and Chair:

Dr. Anna Sophia Knox



Session Description:

- ❖ Natural wetland systems have historically served as water purification systems for many civilizations. More recently, purpose-built, constructed wetlands have been used for this purpose
- ❖ Constructed wetlands are engineered wetlands designed and built to utilize the natural functions of wetland vegetation, soils, and their microbial populations to treat contaminants in surface water, groundwater, or waste streams
- ❖ The ability of wetlands to improve many aspects of water quality has been recognized for many years, and the metal retention capability of wetlands has been effectively used in the U.S. to reduce levels of metals in runoff and drainage
- ❖ The aim of this session is to bring together professionals from disciplines related to contamination in wetland sediments, contaminant fate and transport, and risk assessment of contaminated sediments
- ❖ The session will address both natural and constructed wetland geochemistry and their effectiveness in removal and retention of contaminants

Thursday, April 26, 2018

7:30am-12 noon	Symposium Registration Open [Conference Center - Palm Foyer]		
7:30am-8:30 am	Morning Refreshments in Poster & Sponsor Display Area		
	Concurrent Sessions [8:30am - 10:00am]		
	Session 22	Session 23	Session 24
	Royal Poinciana	Ibis	Egret
	Biogeochemical Processes in South Florida Ecosystems	Contaminant Removal in Wetlands	Wetland Soil Biogeochemistry in Created and Restored Environments
	Mike Jerauld	Anna Sophia Knox	Jacob Berkowitz
8:30am		Introduction & Overview	
8:35am		Matt Huddleston Savannah River Site's A-01 Constructed Wetland System: A Model for Sustainable Aquatic Risk Mitigation	
8:50am		Anna Sophia Knox Metal Mobility and Retention in Constructed Wetland Sediment	
9:05am		Michael H. Paller Using DGT to Measure Bioavailable Metals in A Constructed Wetland Treatment System	
9:20am		Xiaoyu Xu Do Constructed Wetlands Remove Metals or Increase Metal Bioavailability?	
9:35am		Sanjana Banerjee Turning a Liability into an Asset: Can We Use the Invasive Apple Snail Pomacea Maculata In Biomonitoring Of Metal Contamination In Freshwater Marshes?	
9:50am		Q&A	

Please follow these guidelines to ensure the success of our session

- ❖ The total time for each speaker is 15 minutes
- ❖ If a speaker fails to appear, we will not proceed to the next presentation. Instead, we will call for a break or discussion until the scheduled time for the presentation
- ❖ All cell phones should be turned off or silenced



Florida

