

The Coastal Waters Consortium Presents:

Scientist Spotlight



Dr. Buffy Meyer

What is your educational background?

BS, Environmental Sciences, Troy University, Troy, AL
MS, Environmental Sciences, Louisiana State University, Baton Rouge, LA
PhD, Environmental Sciences, Louisiana State University, Baton Rouge, LA

What inspired you to become a scientist?

I actually started college with the intentions of becoming a forensic accountant, but quickly figured out that an environmental sciences program was more my cup of tea. I always enjoyed science classes, particularly lab classes, and environmental sciences provided interdisciplinary exposure to biology, chemistry, ecology, and toxicology.

Can you describe what you enjoy the most about conducting scientific research?

I enjoy the technical aspects of scientific research, especially working with instrumentation and interpreting results.



What is your role as a scientist for CWC?

Our lab provides analytical chemistry support for CWC water and sediment samples (i.e., sample extraction and analysis by gas chromatography/mass spectrometry, GC/MS). We focus on oil chemistry by targeting oil-specific compounds in the samples we receive.

Can you summarize your oil spill research and describe any surprising findings you have come across?

My oil spill research has focused on oil biomarkers - the compounds in oil that are most often used in the oil source-fingerprinting process. These compounds are typically resistant to changes in the environment; however, it has been surprising to see that these compounds are affected in certain coastal marsh environments, and unaffected in other marsh environments like Bay Jimmy, LA.

The Coastal Waters Consortium's mission is to assess the chemical evolution, biological degradation, and environmental stresses of petroleum and dispersant within Gulf of Mexico coastal and shelf ecosystems.