SE&T Colloquium Series-Winter 2013

| Speaker | Dr. Tami Sivy Department of Chemistry |
|----------|--|
| Title | Rapid Testing of Enterococci via qPCR in Fresh Water Beaches |
| Abstract | Current methods to determine levels of fecal indicator bacteria in waterways rely on plate growth with overnight incubation times. New technology and expertise has allowed for the development of EPA Method A: Enterococci in Water by TaqMan Quantitative Polymerase Chain Reaction (qPCR) Assay. The determination of Enterococcus levels is extremely sensitive and can be analyzed in several hours by the qPCR method, giving the potential for better-informed and timelier beach closings. With a grant awarded to Bay County Health Department from the EPA Great Lakes Restoration Initiative (GRLI) via the Michigan DEQ, a partnership was formed between the Health Department and Saginaw Valley State University in order to set up EPA Method A and begin its application to waterways in Bay County. This talk will discuss our first summer of testing with water collected from Saginaw Bay. Also, initial steps to determine the bacterial source (human vs. cow) from contaminated water, a project funded by the Allen Foundation, will be presented. |
| Date | Tuesday, April 2 |
| Time | 4:10-5:00pm |
| Place | Pioneer 240 |
| | Refreshments will be served at 4:00pm. |