

WHOI Tour #2: Chemical Instrumentation Facilities
January 20, 2006

Today's tour focuses on the chemical instrumentation facilities here at WHOI. Each of these facilities is a multi-user facility with many different applications in oceanography (and beyond, for some). At each stop, you'll learn a bit about the instrument(s) in the facility and their primary applications. Although each facility is based on a chemical measurement, the users of each facility come from many different WHOI departments such as Biology, Chemistry and Geology / Geophysics.

Time	Place	Facility	Instrument / Measurements
10:00a	McLean	NOSAMS (Ann McNichol, Dana Gerlach)	Accelerator mass spectrometer; ultra-sensitive analysis of ^{14}C and ^{13}C in CO_2 and carbon-containing materials.
10:30a	Clark	Gaseous Mass Spec Facility (Dempsey Lott)	Many mass spectrometers used for $^3\text{H}/^3\text{He}$ ratios and other gases in seawater
11:00a	Clark	ICP-MS (Lary Ball)	Inductively-coupled plasma mass spectrometers; used to measure metal concentrations in solution
11:30a	Fye	Compound-specific organic analysis (Bob Nelson, Sean Sylva)	2-dimensional GC with time-of-flight mass spectrometers; used to separate, identify and quantify petroleum components Isotope-ratio mass spectrometer; $^{13}\text{C}/^{12}\text{C}$ ratios in specific organic compounds