NENIMF: Current Applications

The following procedures have been established and presently operational at NENIMF:

Applications operational on routine basis

a. U-Pb, Th-Pb chronology of zircon and monazite (O$_2^+$/O$_2^-$ primary beam)
b. Ti contents in zircon and quartz for thermometry (O$_2^+$/O$_2^-$ primary beam)
c. Boron isotopes in silicate glasses (O$_2^+$/O$_2^-$ primary beam)
d. Sr/Ca and Ba/Ca of marine carbonates (O$_2^+$/O$_2^-$ primary beam)
e. B/Ca and B isotope analysis of marine carbonates (Cs$^+$ primary beam)
f. Concentrations of H$_2$O, CO$_2$, F, Cl and S in silicate glasses (Cs$^+$ primary beam)
g. Isotopic composition of sulfur in silicates and sulfides (Cs$^+$ primary beam)

Applications operational but requiring improvement

a. Isotopic composition of Pb in silicate glass and K-feldspars (O$_2^+$/O$_2^-$ primary beam)
b. Isotopic composition of oxygen in silicate, oxide and carbonate minerals (Cs$^+$ primary beam)
c. Isotopic composition of chlorine in minerals and glasses (Cs$^+$ primary beam)
d. Isotopic composition of carbon in carbonate (Cs$^+$ primary beam)

Mg isotopes in marine carbonates are among high priority technical developments to be completed in the near future.

Last updated: November 16, 2009

Copyright ©2007 Woods Hole Oceanographic Institution, All Rights Reserved.
Mail: Woods Hole Oceanographic Institution, 266 Woods Hole Road, Woods Hole, MA 02543, USA.
E-Contact: info@whoi.edu; press relations: media@whoi.edu, tel. (508) 457-2000
Problems or questions about the site, please contact webdev@whoi.edu