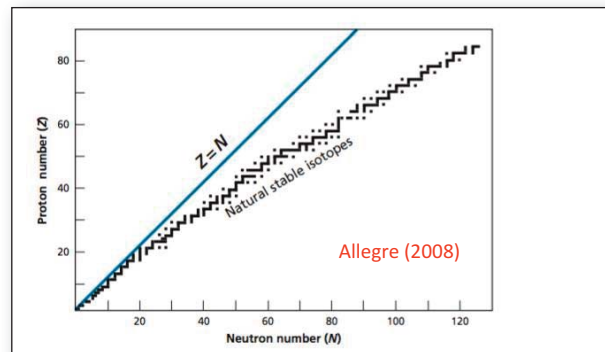


Radiogenic and Stable Isotopic Services

Isotopic Studies play a key role in the characterization of the geological history of samples; be it tectonic alteration ore genesis, etc. The isotopic signature can help in better understanding and unravelling of various geological scenarios. "For example, Isotope data from various analytical methods has been employed in determine the age determination of the Earth, palaeoclimate reconstruction help reconstruct the climate of the past, and explaining the formation of the chemical elements in the Universe" (Allegre, 2008). At Actlabs, we have been offering analyses for a wide range of stable and radiogenic isotopes for over a decade. Our isotopic services cover geochronology, trace radiogenic isotopes as well as stable isotopes.

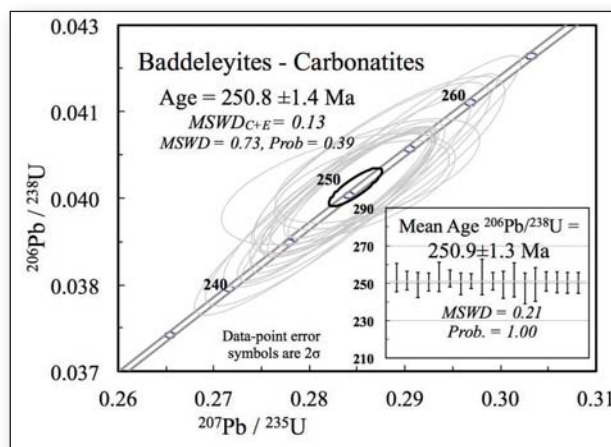


Radiogenic Geochronology

The geochronological methods based on the simple parent daughter ratio that are offered at Actlabs are:

K-Ar,
Ar-Ar,
Sm-Nd,
Re-Os, and
Rb-Sr

U-Pb is offered by TIMS, isotope dilution or as in-situ analysis by Laser Ablation ICPMS on Zircons, Titanites or Monazites. U-Pb by Laser ablation is a rapid, inexpensive in-situ geochronology method which has substituted the conventional methods.



U-Pb Geochronology by In-Situ Laser Ablation ICPMS

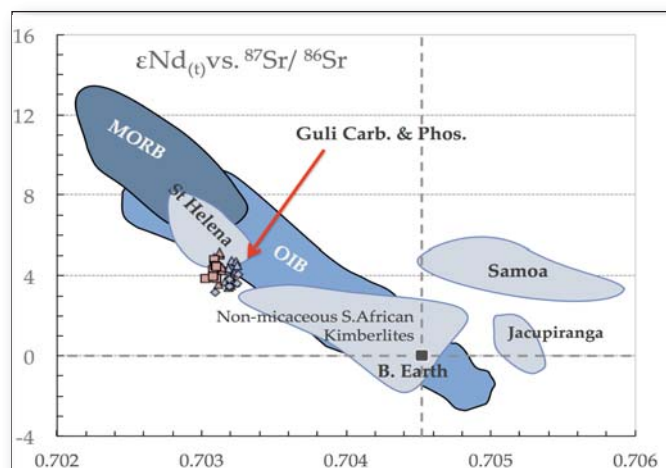
Radiogenic Isotopes

Trace radiogenic isotopes offered at Actlabs are:

Sr, Rb-Sr
Nd, Sm-Nd
Lu-Hf and
Pb.

Stable Isotopes

Stable Isotopes services include: C, N, S, O and H.



ϵ Nd vs Sr isotopes analysis on Mineral separates