

The following Terms of Reference were defined for the Task Group Isotopes in Geosciences:

Objectives

The objective of the TGIG is the definition of a set of recommendations regarding the isotopic compositions and the half-lives of radioactive isotopes, mainly, but not exclusively, for elements used by the geological community for geochronology

Strategies

Distribute and cross-calibrate standards of isotopic composition

Hold periodic meetings to update conventional acceptance of reference values

Increase awareness in the chemical and geological communities

After 10 years, the objectives are being met with regularity. The awareness of the geological community to the recommendations is very good, as attested by the number of citations.

During the past year 2018, considering funding limitations, the TGIG has mostly had electronic meetings; the three IUGS members (Ickert, Renne, Villa) have met in person on the sidelines of the Goldschmidt Conference on geochemistry.

The work of the Task Group is especially long, as each member is asked to independently unravel the contrasting publications in the literature, then jointly discuss all issues, and derive an agreed recommendation that is expected both by the chemical and by the geological community to be accurate and to last for at least a generation.

The TGIG has issued a fourth recommendation after those of 2011, 2015, and 2016.

2018 - Villa I.M., Hibbert B., Holden N.E., Ickert R.B., Possolo A., Renne P.R. - IUPAC-IUGS recommendation on the half-lives of ^{147}Sm and ^{146}Sm . *Geochimica et Cosmochimica Acta*, submitted

Funding requested:

At present, as most meetings are gradually moving to electronic exchange, travel funds for the year 2019 can be reduced to 1500 US\$ (one trip for two IUGS members to the location chosen by the third).