



Stable isotope reference materials at the IAEA - the latest developments.

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During the last few years the IAEA has performed works in several directions as following:

- Released IAEA-603 (replacement of NBS19) - this is primary Stable isotope Reference Material (RM) used for the VPDB 13C and 18O scale realisation,
- Released 6 isotopically enriched (in 2H and 18O) waters,
- Performed careful monitoring of LVEC' property delta-13C value. This resulted in understanding that LSVEC needs a replacement.
- Taken part in characterisation of 18 new organic CRMs (together with Indiana University and USGS)
- Creating collaborations with metrology institutes – focus on metrological aspects of RMs,
- As a spin-off of the Technical Meeting on Stable Isotope Reference Materials (IAEA, Vienna 2014) the European EMPIR project aimed to create infrastructure to produce gas mixtures characterised in CO₂ isotope composition has been established (NPL, UK and other metrological institutes).

The presentation will give details of these works and overview of the current status of RMs production and development.