

Delta-13C scale realisation based on the primary Reference Materials in the form of carbonates.

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The presentation will address the most important aspects of delta-13C scale realisation based on primary Reference Materials (RMs) from the IAEA as following:

- Release of IAEA-603, replacement of NBS19 (info on its uncertainty, consistency of the scale realisation);
- Large uncertainty found for LSVEC (second primary RM defining the scale-span for delta-13C scale). Replacement of LSVEC is urgently needed, the steps planed.
- Metrological requirements for RMs to be used in the atmosphere monitoring.
- A range of RMs needed for optical isotopic analysers – pure CO₂ gases and gas mixtures.
- Collaborations and expected results (e.g. gas mixtures planned by EMPIR project leaded by NPL).

An overview of strategic plan and developments will be given.