



KEMIJSKI INŠTITUT

Vabilo na Preglov kolokvij / Invitation to the Pregl colloquium

Prof. Frank Vanhaecke

Department of Analytical Chemistry, Ghent University, Belgium

Email: Frank.Vanhaecke@UGent.be

Četrtek / Thursday 17. 5. 2018, ob / at 13:00

Velika predavalnica Kemijskega inštituta /
Great Lecture Hall, National Institute of Chemistry;
Hajdrihova 19, Ljubljana, Slovenia

**THE MANY FACES OF
HIGH-PRECISION ISOTOPIC ANALYSIS
USING MULTI-COLLECTOR ICP-MS**

Not only elements with (a) radiogenic nuclide(s), but all elements with ≥ 2 isotopes show natural variation in their isotopic composition. Multi-collector ICP-mass spectrometry offers the precision required to reveal and quantify the differences in isotope ratios thus created.

Isotopic analysis of elements with (a) radiogenic nuclide(s) is used for geochronology (dating) or provenance determination of various material types. Isotopic analysis of elements only showing variation in their isotopic composition as a result of isotope fractionation can be relied on for provenance determination as well, but also for many other application types. Isotope ratios can be used as paleoproxies for revealing the conditions prevailing at the time a process occurred, for obtaining an improved insight into environmental contamination and are currently even explored as novel biomarkers signaling diseases that otherwise can only be established at a later time or via a more invasive approach. Real-life examples from the author's lab will be discussed.

info: dr. Johannes T. van Elteren elteren@ki.si



Vljudno vabljeni / Kindly invited