## 2019 Quality Assurance Workshop at the Goldschmidt Conference in Barcelona

## How good are your data? Workshop on uncertainty and traceability assessments of isotope ratio measurements

This workshop addressed the specific challenges and possible approaches to uncertainty analysis of isotope ratio measurements. Topics included uncertainty analysis and calculations for reporting isotopic data, proficiency test results, and interlaboratory comparisons. The morning session involved lectures and discussions with experts in which the basic uncertainty calculations applicable to most data types and disciplines and the role of uncertainty calculations in improving the robustness and usefulness of isotope ratio data were covered. The afternoon session focused on software applications for uncertainty estimation (e.g. using the NIST Uncertainty Machine available on the Internet) to calculate uncertainties in a handson learning environment



Course presenters were Mark Tyra (NIST), Savelas Rabb (NIST), Martin Rosner (Isoanalysis, Berlin) and Thomas Meisel (Montanuniversität Leoben, Austria).