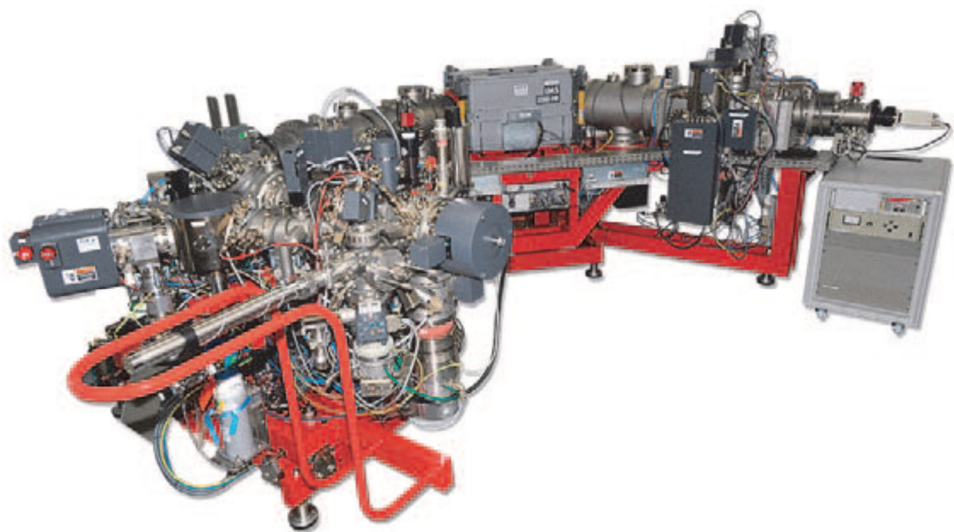


## SIMS Course 2016

In November 2016, the IAG again supported the short course *Introduction to Secondary Ion Mass Spectrometry in the Earth Sciences*, which has been held at the Helmholtz Zentrum Potsdam, Germany since 2002. It is aimed at graduate students and early career researchers and attracted 26 participants from across Europe and beyond. They receive basic training in microanalytical geochemistry, as well as a broad foundation in the use of SIMS as a tool for isotope ratio and trace element determinations. As always, the course strongly emphasised both the calibration of SIMS quantitative results and the necessary sample preparation requirements needed to ensure optimal data quality.



New in 2016 was a post-course visit to the accelerator-SIMS facility at the Helmholtz Zentrum in Dresden and the NanoSIMS and ToF [Time of Flight]-SIMS facility at the Helmholtz Centre for Environmental Research in Leipzig. This optional addition to the course provided those participating with a glimpse of the new technologies now being used for the quantification of ultra-trace level abundances on nanogram sample masses (the accelerator-SIMS in Dresden) and what is required to prepare biological specimens and the new classes of peripheral instrumentation needed for visualizing structures at the nanometre scale (Nano-SIMS and ToF-SIMS in Leipzig).



*Short course participants learn about the Helium Ion Microscope in Leipzig, which is capable of visualizing biological structures at the sub-nanometre scale.*



*Participants from the SIMS short course during a visit to the Super SIMS instrument in Dresden.*