



International Association of Geoanalysts

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WORKSHOP REPORTS

This past August, the International Association of Geoanalysts co-sponsored two workshops. Here we report on these activities.

Biennial Secondary Ion Mass Spectrometry Workshop

The 7th Biennial Geochemical SIMS Workshop (BGSW7) was held on 20–22 August 2013 at the Helmholtz Centre Potsdam, GFZ German Research Centre for Geosciences. This two-and-a-half-day event attracted 50 delegates from 14 countries on 5 continents. The first afternoon of the workshop featured six invited keynote talks from leading experts in the field of secondary ion mass spectrometry (SIMS). The talks covered such diverse applications as nuclear forensics, accelerator-based Super SIMS, and the operational design of the emerging Helmholtz SIMS network. The remaining two days were devoted to poster and oral technical presentations from world-leading SIMS facilities; these reports described current activities, recent analytical breakthroughs, and newly refined data-collecting strategies. Altogether, 33 abstracts were submitted for presentation at the workshop.

Both the IAG and Wiley Publishing, publishers of the IAG's official journal, *Geostandards and Geoanalytical Research*, generously supported the evening cultural program, and they deserve particular recognition for having made possible a visit to the site of the 1945 Potsdam Conference and the historic Cecilienhof Palace. Generous corporate donations from Cameca and Australia Scientific Instruments also contributed to the relaxed and collegial setting, including a dinner cruise to Berlin on the Havel River and an evening barbeque on the laboratory terrace. Delegates also had the opportunity to visit Potsdam's newly installed SIMS facility as well as historical places on the GFZ campus, including the site of the world's first teleseismic observation, made in April 1889.

Thanks to the scientific contributions of the many delegates and the financial support provided by the sponsors, BGSW7 provided a near-perfect setting for the exchange of ideas among many of the most active geo-SIMS laboratories. The interactive nature of the workshop combined with the presence of leading members of this highly specialized community contributed to the advancement of this top-end analytical technology.

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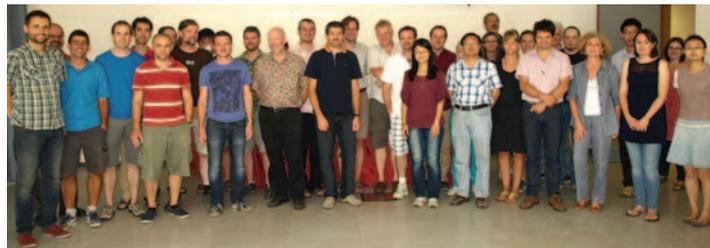


Participants in the 7th Biennial Geochemical SIMS Workshop in Potsdam.
PHOTO: ELISABETH GANTZ

Boron Isotope Workshop

Just prior to the Goldschmidt 2013 conference, the Pisa Boron Working Group and the IAG organized a workshop to bring together the geochemical boron (B) isotope community. Hosted by the Istituto di Geoscienze e Georisorse (CNR Pisa), this workshop provided a forum for discussing the various methodologies and mass spectrometric techniques available for boron isotope analysis.

Attracting 35 scientists from around the globe, including delegates from Asia, North America, Europe, and Australia, the workshop began on Saturday, August 24. The morning session started with a presentation about measurement uncertainties in B isotope data, which was followed by a block of talks presenting the different mass spectrometric techniques and chemical methodologies currently in use for determining B isotope ratios. The afternoon session began with the results from the Boron Isotope Intercomparison Project on carbonates. This was followed by a talk presenting the state of the art in B isotope matrix-matched reference materials characterization, assessing which materials are most urgently needed. After a coffee break, the afternoon session focused on new applications and methodologies, with presentations on B isotope ratios in bioapatite, plants, and silicates, as well as on a newly devised method for online B-matrix separation. The social part of the workshop featured an exquisite dinner in the old town of Pisa and concluded at 2:30 Sunday morning in front of a student pub.



Lunchtime group photo of participants in the boron isotope workshop hosted by the Istituto di Geoscienze e Georisorse in Pisa, Italy. PHOTO: JOCHEN VOGL

Most discussions touched on issues such as quality control in B isotope analysis, data comparability, and realistic measurement uncertainties in B isotope data. A major issue that repeatedly arose during the workshop was the shortage of well-characterized reference materials for carbonate work, and in particular the challenges faced by in situ analyses using SIMS and LA-MC-ICP-MS. The presentations at the workshop, as well as recent papers, highlighted MC-ICP-MS as a powerful mass spectrometric technique for determining precise, reproducible, and accurate B isotope ratios on a broad spectrum of matrices.

The B workshop in Pisa was the most recent in a series of meetings involving the geochemical B isotope community at which new analytical developments and applications have been discussed. The primary intent of this ongoing effort is to solve analytical problems through joint, community-wide approaches. The organizers would like to highlight the International Association of Geoanalysts and its journal, *Geostandards and Geoanalytical Research*, as suitable platforms for geo-analytical projects, and they hope that the B isotope workshop in Pisa will stimulate new cooperations within the B isotope community.

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