

## **International Association of Geoanalysts**

## http://geoanalyst.org

# WINNERS OF THE IAG EARLY CAREER RESEARCHER AWARD

Our Early Career Researcher Award was launched in 2006 and is made annually for research by a young scientist that closely reflects the goals of our Association. The award aims to promote the careers of scientists who have either developed innovative analytical methods or provided new strategies to improve data quality as applied to the chemical analysis of geological or environmental materials.

The joint winners of the 2024 Award are Shiqiang Huang (Colorado School of Mines, USA) and Birk Härtel (University of Calgary, Canada). They will be presenting their research and receiving their IAG awards at the 2024 Goldschmidt conference to be held in Chicago, USA, 18–23 August.



**Shiqiang Huang** manages the LA-ICP-MS/MS lab at Colorado School of Mines (CSM), USA, specialising in LA-ICP-MS techniques and their application in economic geology. During his PhD (2019–2022) at CSM, his studies were focused on in-situ Rb-Sr dating of micas and the influence of organic matter on the Re-Os dating of pyrite. After completing his PhD, he has been engaged in the U-Pb dating of zircon, garnet, and cassiterite, plus trace element analysis and mapping of various

minerals and glasses. In addition, he is working to improve the U-Pb dating method for wolframite and scheelite, as well as on indicators of magma fertility in the Las Bambas deposit, Peru, which involves extensive LA-ICP-MS measurements.



**Birk Härtel** is a postdoctoral researcher at the Department of Earth, Energy and Environment at the University of Calgary (Canada). His field of research is method development and data analysis in low-temperature thermochronology. He received his PhD degree from Freiberg University of Mining and Technology (Germany), where he worked on the development of α-radiation-damage-based dating of zircon. He established a new calibration procedure for radiation-damage

measurements on zircon with Raman microprobe that takes into account the damage sensitivity of different Raman bands. He also developed new protocols for age calculation and data evaluation for zircon-Raman and other thermochronometers, and suggested a new reference material for (U-Th)/He analysis. Currently, Birk is developing a tripledating approach to combine zircon-Raman dating with in-situ (U-Th)/He and U-Pb dating by LA-ICP-MS.

For more information about our winners and their publications, please see www.geoanalyst.org/early-career-researcher-award/  $\frac{1}{2} \frac{1}{2} \frac{1}{2}$ 

### IAG LINKEDIN® PAGE

The IAG is now using LinkedIn® to provide regular updates with announcements about IAG initiatives including, but not limited to, conferences, workshops, awards, proficiency testing schemes, reference material developments, and other exciting news from the field of geoanalysis.

Stay updated with our latest news and events by following the IAG on LinkedIn®. To start receiving these updates, simply visit https://www.linkedin.com/company/geoanalyst to visit our LinkedIn® page and click the "Follow" button.

### **GEOANALYSIS 2024**

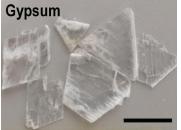
Please join us at the 12<sup>th</sup> International Conference on the Analysis of Geological and Environmental Materials in Wuhan, China this September. The China University of Geosciences is hosting the latest in this series of international conferences devoted to developments in analytical geochemistry and their application.



Several IAG bursaries are available to assist students to attend this conference. For more information, please consult https://geoanal-ysis2024.aconf.org/

#### **NEW SULPHATE REFERENCE MINERALS**

The IAG supports an ongoing programme for the characterisation and distribution of high-quality materials targeting the calibration of isotope ratio determinations based on in-situ analytical methods. These include tourmalines characterised for Li, B, and O isotope ratios and apatites for Cl and O isotope ratios.







Test samples of gypsum-16655, anhydrite-13491, and barite-14898 (scale bar 1.3 cm).

Recent additions to our list of mineral reference materials are some sulphate minerals (anhydrite, gypsum, and barite) characterised for  $\delta^{18}O$  and  $\delta^{34}S$ . These can be purchased individually or in sets consisting of either two anhydrites, two gypsums, or three barites. Full details of their characterisation can be found in Li et al. (2023).

In all cases, a single aliquot consists of approximately 100 mg of sub-1.4 mm chips of material. A full list of our reference materials and prices can be found at iageo.com – IAG members qualify for a significant discount (up to 30%).

Li B and 12 coauthors (2023) Barite, anhydrite and gypsum reference materials for *in situ* oxygen and sulfur isotope ratio measurements. Geostandards and Geoanalytical Research 48: 179-205, doi: 10.1111/ggr.12533

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