2023 IAG YOUNG SCIENTIST AWARD

This award is made annually to scientists at an early stage in their career and undertaking research that closely reflects the goals of our Association, such as the development of innovative analytical methods or new strategies to improve data quality as applied to the chemical analysis of geological or environmental materials. The award consists of a cash prize of $1000 US, plus registration and abstract fees for the next Goldschmidt conference.

This year we have two winners: Jing-Yao Xu (IGGCAS, Beijing, China) and Ming Yang (Zhejiang University, China). They will be presenting their research and receiving their awards at the 2023 Goldschmidt conference in Lyon, France, 9–14 July.

Jing-Yao Xu received her PhD from the University of Barcelona, Spain, and is now a postdoctoral researcher at the Institute of Geology and Geophysics, Chinese Academy of Sciences (Beijing). The main focus of her research has been the development of new reference materials and analytical methods for the microanalysis of stable isotopes of composition-variable minerals by secondary ion mass spectrometry (SIMS) and geological applications to trace mantle composition and magma evolution. She developed new dolomite reference materials for SIMS oxygen isotope analysis and a novel accurate and rapid on-line matrix effect calibration method for dolomite O-isotope analysis. The new on-line method takes SIMS $^{18}$O–$^{16}$O–$^{56}$Fe$^{16}$O–$^{24}$Mg$^{16}$O measurements concurrently without additional Fe# values obtained by electron probe microanalysis. She used this SIMS method to determine the composition of a range of olivines from kimberlites worldwide, and her studies shed light on the modification of mantle-derived magmas via interactions with the lithospheric mantle.

Ming Yang is an assistant researcher at the Hainan Institute of Zhejiang University (China). The focus of his research has been the development of new reference materials (RMs) and setting up analytical protocols for the isotope analysis of accessory minerals using LA-MC-ICP-MS. Ming got hooked on geoanalytical research during his experience running the laboratory as a student assistant. During his PhD, he started to work intensively on geochronology studies of W–Sn deposits. He set up a new protocol for wolframite and cassiterite U–Pb dating and developed new wolframite and cassiterite RMs. The resulting methodology and RMs enabled him and his co-workers to solve the critical question of the timing and duration of hydrothermal W–Sn mineralization. He documented the Lu–Hf isotopic compositions of some Chinese geological rock RMs and evaluated their homogeneity. He has also developed several new allanite RMs for in situ U–Th–Pb dating and Sm–Nd isotope analysis.

More details are available at www.geoanalyst.org/young-scientist-award/.