

Joint winner of the 2021 IAG Young Scientist Award

Alicja Wudarska



Alicja is a postdoctoral researcher at the Institute of Geological Sciences of the Polish Academy of Sciences in Warsaw. The main focus of her research has been the development of new reference materials for isotope analysis of apatite using secondary ion mass spectrometry (SIMS). She has recently completed two projects related to chlorine and oxygen isotopes that she conducted in collaboration with the SIMS laboratory at the GFZ Potsdam. The results of her work were published recently in *Geostandards and Geoanalytical Research*, and the metrological splits of the apatite samples described therein can be obtained through IAGeo Limited (iageo.com). Currently, Alicja and her team from the SIMS lab are working towards development of reference material(s) for U-Pb dating of apatite, and her project is being supported by an *IAG Geoanalytical Research and Networking Grant*.

Alicja undertook the study of new apatite reference materials in order to collect the SIMS data for her PhD project. This was focused on the investigation of geochemical processes which shaped the early Archean Isua supracrustal belt (SW Greenland), by means of hydrogen and chlorine isotope measurements in minerals of the apatite group². In the future, she is planning to apply stable isotope analysis to bioapatite research. She is especially interested in the application of these methods to wildlife conservation.

When Alicja is not working, she enjoys exploring the world with her husband as well as gardening, crafts and reading about Australian wildlife.

¹Wudarska et al. *Inter-laboratory characterisation of apatite reference materials for chlorine isotope analysis. Geostandards and Geoanalytical Research*, doi: 10.1111/ggr.12366

²Wudarska et al. (2020). *Chlorine isotope composition of apatite from the >3.7 Ga Isua Supracrustal belt, SW Greenland. Minerals*, doi: 10.3390/min10010027