

Meet the Authors



Huiming Bao (鲍惠铭) is a professor of geology and geophysics at Louisiana State University (USA). He earned his PhD in geosciences from Princeton University (New Jersey, USA) in 1998. His research interests have evolved from fossils to shallow marine carbonate systems, to ancient soil deposits, to atmospheric chemistry, to his most recent interest in the Moon and Mars. He has contributed to the theory, technique, and applications of triple oxygen isotope compositions to geology, environmental, and planetary problems at different spatial and temporal scales.



Magdalena Blum-Oeste is a geoscientist with a passion for how best to visually represent the information contained in data sets. Magdalena earned her Diploma (2007) and PhD (2014) from the University of Göttingen (Germany). In her studies, she focused on the P - T evolution of magmatic systems in the Central Andes. She moved on to work at the Technische Universität Berlin (Germany) in 2012, where she was involved in teaching petrology. She is currently an intern in data visualization at 2° Investing Initiative (Berlin, Germany).



Shanaka (Shan) de Silva is a professor of geology and geophysics at Oregon State University (USA). He has degrees from the University of Southampton and the Open University (both UK). With students and colleagues, he applies a “forensic” approach to understanding silicic volcanism and associated magmatism, notably to super-eruptions around the

Pacific rim. He is Vice-President of the International Association of Volcanology and Chemistry of the Earth's Interior, a Fellow of the Geological Society of America, Science Editor for the journal *Geosphere*, and an associate editor of the *Journal of Volcanology and Geothermal Research*.



Lluís Fontboté obtained his MSc from the University of Granada (Spain) and his PhD from Heidelberg University (Germany). He is currently a full professor at the University of Geneva (Switzerland) where he leads an ore deposits research group. His main areas of expertise are epithermal polymetallic deposits linked to porphyry systems, iron oxide–copper–gold deposits, and Mississippi Valley Type deposits. In collaboration with his students and coworkers, Lluís has also published on volcanic-hosted massive sulfide deposits, on orogenic gold deposits, and on acid mining drainage. He has also worked in ore exploration mainly in the Andes.



Gregory D. Hoke is an associate professor of Earth sciences at Syracuse University (New York, USA). He earned a PhD in geological sciences from Cornell University (New York, USA) and was a National Science Foundation and an Alexander von Humboldt Postdoctoral Fellow. His research centers on the uplift and erosion of mountain ranges by

using a variety of approaches, including stable isotope paleoaltimetry, cosmogenic nuclides, and landscape analysis. His first set foot in the Andes in 2001.



Suzanne M. Kay is the William and Katherine Snee Professor of Geological Sciences at Cornell University (USA). She earned a PhD from Brown University (USA) and was a post-doctoral fellow at the University of California Los Angeles (USA). She is an honorary professor of the University of Buenos Aires (Argentina). Using field work, rock and

mineral analyses, and passive source seismic data, Suzanne researches the growth and evolution of continental crust at subduction zones, particularly in the Andes and Aleutians. She is a past president of the Geological Society of America and has been elected a fellow of the AGU, MSA, GSA and SEG. She is a member of the Argentine National Academy of Sciences.



Mirian Mamani is the Regional Geology Director at the Geological Survey of Peru (INGEMMET). She received her PhD in geochemistry from the University of Göttingen (Germany) in 2006 and completed a post-doc at that university in 2009. Most of her research has focused on the spatial and temporal variations of magma composition along the Peruvian Andes and northern Chile and on the magmatic processes linked to ore deposits.



Alison (Al) Paca is a life member of the Atacama Institute for Indigenous Development and Sustainable Use of the Atacama (Instituto de Desarrollo y Uso Sostenible de Atacama), and she has been working in the Central Andes for the past eight years. Her research has concentrated on how nutritional elements are transferred from soils to plants in this extreme arid climate. In doing so, her main interest lies in the sustainable use of local, partly endemic, plant species of the Altiplano region for feeding local live stock. Al Paca and her colleagues concentrate on the grass known locally as “ichhu” (Peruvian feathergrass), the typical itchy grass of the Altiplano grasslands. But her favorites are the leafy plants that grow in “bofedales”, a local term for high Andean swampy wetlands.



Martin Reich is professor of geology at the University of Chile in Santiago. He holds a BSc from the University of Concepción (Chile) (2001) and a PhD from the University of Michigan in Ann Arbor (USA) (2006). As a geologist specializing in the geochemistry of mineral deposits, he is recognized for applying a wide range of research methods to understanding ore-forming processes at different scales. His research in the Central Andes has bettered our understanding of the evolution of supergene resources, including copper, iodine, and nitrate, and has showed how ore deposits can help clarify weathering and climate histories.



Taylor F. Schildgen works at the GFZ (GeoForschungs-Zentrum) German Research Centre for Geosciences and is a professor at the University of Potsdam (Germany). She obtained her bachelor's degree from Williams College (Massachusetts, USA), her MS from the University of Edinburgh (Scotland), and her PhD from the Massachusetts Institute of Technology (USA). Her expertise is in how tectonics and climate change influence erosion rates and the morphology of Earth's surface by using low-temperature thermochronology and terrestrial cosmogenic nuclides.



Gerhard Wörner received his PhD 1982 from Ruhr-University Bochum (Germany) and, since 1993, he has held a professorship in geochemistry at the University of Göttingen (Germany). His research in the Central Andes links the record of magmatic evolution, as archived in the growth history of phenocrysts in lavas, to the volcanological evolution of individual volcanic centers. He studies volcanic deposits and aspects of crustal and landscape evolution as related to the formation of the Central Andes. In addition, he works on arc magmatism in Kamchatka (Russia) and in Central America.