

European Association of Geochemistry



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2024 EAG MEDALISTS

2024 H.C. Urey Award to Janne Blichert-Toft



Janne Blichert-Toft (ENS de Lyon and CNRS, France) is a leading light in the study of planetary mantles and crustal evolution on Earth and other Solar System bodies (e.g., Mars). She has helped pioneer bold new applications of isotope geochemistry (principally to the study of hafnium, but also of lead) with specialization also in the highly siderophile elements, to name but a few lines of inquiry in her exceptional bibliography. Moreover,

her work has helped to steer radiogenic isotope geochemistry more broadly towards quantitative applied chemical geodynamics. Janne Blichert-Toft is an unwavering supporter of the field of geochemistry in Europe and throughout the world, as exemplified by her generous devotion to supervising students and postdoctoral scholars, dutiful service to professional organizations, and leadership on journal editorial boards.

2024 Science Innovation Award to Evelyn Füri

The 2024 Science Innovation Award is named in honor of Samuel Epstein, recognizing his work in isotope geochemistry.



During the last few years, **Evelyn Füri** (CRPG, CNRS-UL, France) has accumulated an impressive record of very original results on the origin of volatile elements (mainly N, H, and noble gases) in lunar rocks, Martian samples, cometary materials from the Stardust mission, differentiated meteorites, and asteroid returned samples. These results were achieved by combining laser-assisted noble gas mass spectrometry and high

mass–resolution secondary ion mass spectrometry to resolve the distribution of the isotopes of H, N, and rare gases at the microscale in extraterrestrial samples.

2024 F.G. Houtermans Award to Feifei Zhang



Feifei Zhang (Nanjing University, China) is recognized for his important contributions to analysis of biosphere–environment co-evolution based on non-traditional isotopes (Fe, U, Li, Ca, Ba, Tl) combined with numerical modeling. His doctoral research helped to establish the carbonate U-isotope proxy as a global-ocean redox indicator, opening new avenues of research in paleoceanographic studies. His more recent work has focused

on the development of isotopic proxies for continental weathering, marine productivity, and ocean acidification.

2023 DISTINGUISHED LECTURER SANDRA ARNDT REPORTS BACK FROM HER TOUR OF EASTERN EUROPE

I have been a fan of the EAG's distinguished lecturer tour format for quite some time, so you can imagine my excitement when I was asked to be this year's lecturer. My enthusiasm was particularly fueled by this being an excellent opportunity to demystify biogeochemical modeling a bit: explain how models are built, how they work, how different types of models from diagenetic models to earth system models can be combined and what kind of data they need and what kind of questions they can answer. Although biogeochemical modeling has been an integral part of (bio)geochemistry research for decades, it



Sandra Arndt presenting the EAG distinguished lecture at Sofia University, Bulgaria.

is not a subject to which most geoscience students get easily drawn, and bridging the model—data divide sometimes still remains a challenge. I specifically wanted to highlight the importance of close, interdisciplinary collaborations in model design and set-up, and showcase how models act as a platform for knowledge synthesis and integrate multidisciplinary observational and laboratory data. I thus prepared three lectures that spotlight different model approaches, model—data collaborations, and model—model interactions, aiming to unravel the intricacies of complex biogeochemical dynamics that underlie crucial carbon cycle—climate feedback.

But, for me, the EAG's distinguished lecturer tour not only provided an excellent opportunity to showcase the power of biogeochemical modeling, but also an incredible venue to widen each other's views and learn from each other's experiences. I am immensely grateful for the warm hospitality extended by Csaba Szabó in Budapest (Hungary), Tomáš Magna in Prague (Czech



Sandra with colleagues from Eötvös University, Budapest, Hungary.

Republic), and Momchil Dylgerov in Sofia (Bulgaria), their research communities, colleagues, and students. I really enjoyed the scientific exchange, but also particularly valued their openness and the insight they shared about their national geoscience research and educational landscapes. It was instructive to compare notes and discuss the pandemic's impacts on geoscience education, common challenges in student recruitment, international mobility, and geoscience outreach. I also found it fascinating to see how dominant geoscience research interests, methods, and practice vary from country to country. I particularly enjoyed delving into the influence of the profound, recent political changes in central and eastern Europe, from the fall of the Iron Curtain to the eastward expansion of the European Union, on the geoscience research and education landscape. Finally, Csaba, Tomáš, and Momchil also added a real personal touch and genuine glimpse into local history and culture, from Roman remains in Sofia's metro and a beautiful, hidden coffee shop at the university, to a cozy restaurant tucked away in one of Budapest's side streets, and the lively atmosphere of the pivnice in Prague's old town.

I would like to thank the EAG for this opportunity, Marie-Aude Hulshoff for orchestrating a first-class organization, and, once again, my incredible hosts Csaba, Tomáš, and Momchil for their warm welcome, the local organization, their openness, and insights. For me personally, this exchange has been a fascinating experience, fostering not only professional exchange and connections but also a deeper understanding of our diverse European geoscience research and education landscape. I hope this sentiment resonates with everyone who attended.

Dr. Sandra Arndt, Université Libre de Bruxelles, Belgium

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v6, n2



v1, n1 The Iron Biogeochemical **Cycle Past and Present** ROBERT RAISWELL AND DONALD E. CANFIELD



v1, n2 The Carbon Cycle and **Climate Change: Memoirs** of my 60 years in Science WALLY BROECKER



v1, n3 Sculpting of Rocks by Reactive Fluids AND ØYVIND HAMMER



v1, n4-5 Mineral-Aqueous Solution Interfaces and Their Impact on the Environment GORDON E. BROWN, JR. AND GEORGES CALAS



and Ocean Acidification FRED T. MACKENZIE AND ANDREAS J. ANDERSSON



Noble Gas Constraints on the Origin and Evolution of Earth's Volatiles



Formation and Evolution of the Continental Crust



Fluids in the Continental BRUCE W.D. YARDLEY AND ROBERT J. BODNAR



Natural Resources in a **Planetary Perspective** HARALD SVERDRUP AND K. VALA RAGNARSDÓTTIR



v4. n1 Hydrothermal Processes HUBERT L. BARNES



v4, n2 Probing the Earth's Deep Interior Through Geochemistry



v5, n1 Siderophile Elements in Tracing Planetary Formation and Evolution



Thoughts and **Experimental Trace**



Future Global Mineral



MARTIN SHARP AND MARTYN TRANTER

Glacier Biogeochemistry



Cosmochemistry along the Rhine HERBERT PALME



CO₂: Earth's Climate Driver WALLY BROECKER



v8, n1 **Big Picture Geochemistry** from Microanalyses – My Four-Decade Odyssey



v8, n2 My Stable Isotope Journey in Biogeochemistry, Geoecology, and



v9, n1 Geology, Policy and Wine - The Intersection of



Origins and Early Evolution



v10, n1 **Academic Reminiscences** and Thermodynamics-**Kinetics of Thermo-Barometry-Chronology** JIBAMITRA GANGULY



Sulfur Biogeochemical Cycle of Marine Sediments BO BARKER JØRGENSEN



LOURENS G.M. BAAS BECKING, ALEXANDER J.P. RAAT (ED.)



Anoxia-Related Biogeochemistry of North Indian Ocean



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Carbon Capture and Storage: From Global ERIC H. OELKERS AND SIGURDUR R. GISLASON



LATEST ISSUE Exploration – Some Personal Reminiscences RICHARD H. SILLITOE

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