

# Newsletter

of the  
International Association of  
GeoChemistry

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## Water Rock Interaction (WRI-17) and Applied Isotope Geochemistry (AIG-14) in Sendai, Japan

The second IAGC International Conference (WRI-17 and AIG-14) will be held in Sendai, Japan from 18–22 August 2023. Along with many diverse and interesting presentations from geochemists around the world, the [Ingerson Lecture](#) will be given by Dr. Martine Savard (2022) and the first [Jin Jingfu Memorial Lecture](#) will be given by Yuan Mei (2022). We also encourage all attendees to visit the IAGC booth at the meeting. We are excited to see you all there!



The 2nd International Association of Geochemistry (IAGC) Conference  
Water-Rock Interaction **WRI-17**  
Applied Isotope Geochemistry **AIG-14**  
in SENDAI 2023

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Twitter: [@IAGeoChemistry](https://twitter.com/IAGeoChemistry)

Visit the [website](#) to learn more

## 2024 PhD Student Research Grant Applications

We receive great interest in our Elsevier/IAGC PhD Student Research Grants each year, and they have become a high-profile recruiting tool for the organization.

**We will post instructions for applying for the 2024 PhD Student Research Grant program on 1 October, 2023.**

Applications will be due on **1 December**. We encourage all to apply! Keep an eye on our website and Twitter for the announcement:

<https://www.iagc-society.org/Student-Grants>

Twitter: [@IAGeoChemistry](https://twitter.com/IAGeoChemistry)

## 2023 IAGC Awards

We are pleased to announce our Society Awards! Congratulations to the recipients and thank you for your service to the IAGC and the geochemical community!

### Harmon Distinguished Service Award

**Michael Kersten** was born in 1956 and educated as mineralogist. He has been conducting research in applied geochemistry for four decades. Prof. Kersten started his career as a marine scientist in 1983 with Prof. Ulrich Förstner at the Hamburg University of Technology, Germany. For ten years he participated in more than 50 marine RV cruises around Europe. From 1992 -1994 he joined the

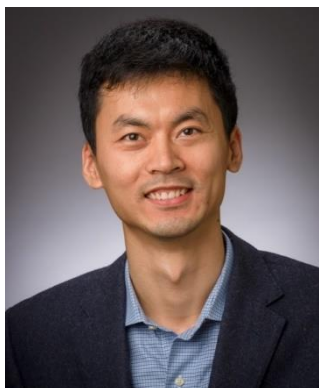


group of Prof. Werner Stumm at EAWAG (Switzerland) as a postdoctoral fellow. After completing his fellowship, he became group leader of the Baltic Sea Research Institute in Rostock, Germany. From 1997 until his retirement in 2022, he was Professor of Environmental Geochemistry at the Johannes Gutenberg University, Mainz, Germany. The topics of his studies evolved over time from characterization of intertidal and marine sediments, with a special emphasis on pore water geochemistry and early diagenesis, to thermodynamics of cements as waste disposal matrices, and contaminant retardation by minerals in soils and aquifer sediments. Prof. Kersten used a wide-range of research techniques, from laboratory chemical analytics to advanced synchrotron X-ray techniques including time-lapse nanotomography and  $\mu$ -XAS. The goal was to understand the spatiotemporal reactive solute transport and microbial activities at the pore scale. In addition to his research, he was also active in several national and international societies. He served as an officer of the IAGC and as Editor-in-Chief of the IAGC/Elsevier journal, *Applied Geochemistry* from 2013-2022. With his full dedication and active engagement in this service role, *Applied Geochemistry* reached exciting metrics such as a historically high WoS Impact Factor of 3.84 in 2022.

The IAGC would like to offer a special thanks to Prof. Michael Kersten for donating the 2023 Harmon Distinguished Service Award honorarium to support IAGC memberships from low- and middle-income countries.

## Kharaka Award

**Shuo Zhang** is an associate professor in the Department of Hydraulic Engineering at Tsinghua University, Beijing, China. He received his Ph.D. in Earth and Planetary Science from University of California, Berkeley in 2014. He worked at the Aramco Global Research Centers-Houston from 2014 to 2019 before joining Tsinghua University. His research focuses on fluid-rock interactions in porous media, especially in relation to climate change and global warming. He has worked on the geochemical mineralization of carbon dioxide during geological carbon sequestration, deep sea sediment-fluid interactions, and reaction kinetics. Dr. Zhang is currently looking at terrestrial weathering of carbonate minerals and its role in removing atmospheric carbon dioxide. He has contributed over thirty journal publications in geochemistry, hydrology, and marine science covering theoretical, experimental, and modeling approaches.



more than 183 being referenced in Web of Science (H-index 44) and 335 communications in international conference proceedings. Since his Accreditation to supervise research work in 2005, he has acted as a PhD supervisor and has trained ten PhD Students and several Postdoctoral Fellows. He is currently supervising one PhD student. Additionally, Prof. Négrel has been involved in the organization of scientific events and has acquired experience as a member of various Conference Organizing Committees and Scientific Committees of international conferences and workshops. He is a committed research coordinator with experience supporting a large team of scientists (geochemists, geologists, isotope specialists, chemists) and systematic reviewers. He is skilled at handling multiple time-constrained projects, and he has been involved in EU projects (Coordinator, Work Package leader) and national research projects with French public bodies (project manager for ADEME, Water Agencies, and regional Councils projects). He has also gained experience in managing and coordinating research. Prof. Négrel has acted as deputy director of Divisions in BRGM (2010-2022) and led relations with companies for scientific contract research, and co-funded research projects and for communication actions of the Divisions. He is currently involved in major international bodies and programs as a member or chair of working groups dedicated to geochemistry (President of the International Association of GeoChemistry IAGC 2017-2018, Chair of the EuroGeoSurveys Geochemistry Expert Group since 2018), to sediments transfer (Steering Board member of the European sediment network SedNet) and to soil health (EuroGeoSurveys delegate in the Enlarged soil expert group for the implementation of the European Soil Strategy to 2030 to prepare the European Law on Soil).

## IAGC Fellow

**Philippe Négrel** was awarded a PhD in isotope geochemistry and an Accreditation to supervise research work (HdR). He specialized in isotope geochemist for 30 years and has made interdisciplinary contributions in the fields of surface water–groundwater interactions, water–rock interactions, continental erosion, tracing actual and paleo circulation. His achievements are well reflected in publications in top journals, with



## 2022 *Applied Geochemistry* Excellence in Review Awards

Since the founding of *Applied Geochemistry* in 1986, many outstanding reviewers have helped shape our Society's journal and our success as a Society. We are indebted to those contributions, and would like to highlight the reviewers who deserve extra recognition. The editorial board of *Applied Geochemistry* launched our annual [Excellence in Review Award](#) to recognize the dedicated community of expert reviewers inside and out of our organization. Each awardee receives a digital certificate and a complimentary 2-year membership in the IAGC. We offer a big THANK YOU to all of our awardees and congratulations!

### [Ellina Bernard](#)

Empa, Laboratory for Concrete & Construction Chemistry, Switzerland

### [Martin Blumenberg](#)

Geoscience Center, Geobiology Group, Georg-August-University Göttingen, Germany

### [Tiziano Boschetti](#)

Department of Chemistry, Life Sciences and Environmental Sustainability-University of Parma, Italy

### [Wengeng Cao](#)

The Institute of Hydrogeology and Environmental Geology, CAGS, China

### [Zeljka Fiket](#)

Ruđer Bošković Institute, Croatia

### [Adam Jew](#)

SLAC National Accelerator Laboratory, USA

### [Peter Knappett](#)

Department of Geology & Geophysics, Texas A&M University, USA

### [Chengshuai Liu](#)

State Key Laboratory of Environmental Geochemistry, Institute of Geochemistry, Chinese Academy of Sciences, China

### [Peng Liu](#)

School of Environmental Studies, China University of Geosciences, China

### [Richard Metcalf](#)

Quintessa Ltd., UK

### [Kunfu Pi](#)

School of Environmental Studies, China University of Geosciences, China

### [David Polya](#)

Department of Earth and Environmental Sciences, University of Manchester, UK

### [Joerg Prietzel](#)

School of Life Sciences, Technical University of Munich, Germany

### [Monia Procesi](#)

National Institute of Geophysics and Volcanology, Italy

### [Bernard Sanjuan](#)

French Geological Survey, BRGM, France

### [Guangcai Wang](#)

School of Water Resources and Environment, China University of Geosciences, China

### [Zhen Wang](#)

Nicholas School of the Environment, Duke University, USA

### [Oliver Warr](#)

Department of Earth Sciences, University of Toronto, Canada

### [Deli Wu](#)

School of Environmental Science and Engineering, Tongji University, China

### [Guodong Zheng](#)

Northwest Institute of Eco-Environment and Resources, Chinese Academy of Sciences, China

## Elsevier PhD Student Research Grant Winners

The IAGC is happy to announce the recipients of the 2022 Student Research Grants, sponsored by Elsevier and the IAGC. This is a very competitive award. The success of these grantees demonstrates the extremely high caliber of their research. Congratulations to our grantees!



**Soisiri Charin** - *Improving the understanding of the seafloor hydrothermal system using stable potassium isotopes*

Soisiri Charin graduated from the University of Colorado Boulder with a B.A. in Geological Sciences and from the University of New Mexico with a MSc in Earth and Planetary Science. She is currently a 2nd-year PhD student at the University of Minnesota (USA) in the Earth and Environmental Science Department. The primary objective of her research is to gain insights into the marine potassium cycle emphasizing the seafloor hydrothermal systems through the use of MC-ICP-MS to analyze stable potassium isotopes and hydrothermal experiments.



**Rajarshi Dasgupta** - *Landscape Denudation in the lateritic Rarh region of West Bengal and surrounding areas of Eastern India*

Rajarshi Dasgupta is a geographer who studies Earth surface processes and anthropogenic impacts on the natural environment, particularly in the tropics, using techniques from geomorphology, low temperature geochemistry and the social sciences. He completed his BSc Honours and MA in Geography from University of Calcutta, Kolkata and Jawaharlal Nehru University, New Delhi, respectively. He also has a MSc. in Geology, with specialization in Environmental Geochemistry, from the University of Cincinnati, USA. He is currently a PhD candidate in Geography at Presidency University, Kolkata, where he is



investigating weathering and landscape denudation in the Rarh region of eastern India. The Rarh is an important physiographic region, being a transitional zone between the Chotanagpur Plateau to the west and the Ganga Delta to the east. The area is characterized by the presence of laterites that have either formed in-situ (primary laterites) or developed over allochthonous materials (secondary laterites) and experiences high rates of soil loss due to extensive gullying. Rajarshi plans to investigate major and trace element geochemistry of the Rarh's laterites, sedimentary deposits and rivers, together with the area's geochronology, to discern the spatial variations in weathering pathways, intensity of laterization and denudation rates across the region.

**Cecilia Inés Gutiérrez** - *Structural geometry and kinematics of the Cenozoic deformation of the Austral basin in the Fuegian thrust-fold belt, Tierra del Fuego, Argentina*

Cecilia Inés Gutiérrez graduated from University of Buenos Aires, Argentina, in 2020, with a degree in geological sciences. During her degree, she completed internships in the oil and gas industry where she studied different basins and their petroleum system, such as Neuquina and Malvinas Basins. In 2021 she started her PhD with a scholarship granted by the Argentinian National Scientific and Technical Research Council at the Austral Center of Scientific Research in Ushuaia, Tierra del Fuego. Her PhD research focuses on the characterization of the geometries of the external Fuegian Andes, and aims to establish constraints on timing of deformation and cooling along the strike of the thrust-fold belt, in order to develop a tectonic model for the region. Given the conditions of the area, geochemical



studies, such as vitrinite reflectance, geochronology (detrital zircon U/Pb dating) and thermochronology ((U-Th-Sm)/He and fission-track ages in apatites and zircons) are key to achieve the main objectives of the research. She is also currently part of the University of Tierra del Fuego, where she develops her skills as a Teaching Assistant.

**Thomas LaBarge** - *Characterizing the Evolution of the Serengeti Ecosystem with Stable Isotopes*

Thomas LaBarge received his BSc in Earth Science from Montana State University in 2020 and his MSc in Geological Sciences from Indiana University in 2022. He is now a PhD student in the Department of Earth and Atmospheric Sciences at Indiana University Bloomington. He is interested in palaeoecology and reconstructing the biology of animals in deep time. For his dissertation research, he is using stable isotopes to investigate how the community interactions of the Serengeti ecosystem have changed over time. He is interested in determining how animal diets, interspecific competition structures, and predator-prey relationships have changed between the Pleistocene environments of Olduvai Gorge and Laetoli and the modern ecosystem of Serengeti National Park. To accomplish this, he is measuring N, C, and Zn isotopes from tooth enamel to examine the diets of modern and extinct animals, investigating the contribution of various dietary components to isotopic niche space. He hopes to apply his work to both the interpretation of the ecological relationships of early hominins and the conservation of the modern Serengeti ecosystem.



**Priya Minhas** - *Evolution, Recurrence, and Behaviour of Monogenetic Volcanism in Armenia*

Priya Minhas earned a BSc and MSc by Research in Geology from the University of South Wales (UK). After graduating, she completed a Postgraduate Certificate in Education at the University of Warwick (UK), before gaining employment as a geography teacher. Priya is currently completing a PhD in volcanology at Swansea University (UK). Her research focuses on using  $^{40}\text{Ar}/^{39}\text{Ar}$  geochronology to determine the spatio-temporal evolution and eruptive recurrence rates of monogenetic volcanism in Armenia. Her aim is to use new  $^{40}\text{Ar}/^{39}\text{Ar}$  ages to inform statistical modelling forecasting the location and timing of future eruptions. Additionally, the ages will be used in combination with SEM and XCT to examine the role of sample vesicularity and crystallinity on  $^{40}\text{Ar}/^{39}\text{Ar}$  systematics. Overall, the project aims to provide a case study to better understand the nature and evolution of monogenetic volcanism and offer the prospect of dating traditionally difficult to date, but common volcanic scoria.



**Xianjiang Zeng** - *Characteristics of dissolved organic matter in groundwater related to chronic kidney disease*

Xianjiang, Zeng received the BSc degree in Groundwater Science and Engineering from China University of Geosciences, Beijing, China in 2019. The goals of his present research are to clarify the groundwater DOM characteristics in epidemic areas of chronic kidney disease with unknown etiology (CKDu) in Sri Lanka, explore its impact on CKDu-related groundwater quality, and recognize CKDu-related groundwater in CKDu-epidemic areas. Based on these goals, he is using Fourier transform ion cyclotron resonance mass spectrometry (FT-ICR MS) and excitation-emission matrix (EEM) fluorescence spectroscopy to obtain DOM information about molecular and fluorescent characteristics.



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## Association News

### Awards Nominations Committee

We are excited to announce the 2024 - 2026 IAGC Award Nominations Committee! These committee members will be accepting 2024 IAGC award nominations from August 1 through December 31, 2023. **Continue reading to learn how to nominate your colleagues and peers.** We thank the committee members for their service to the IAGC.



### Eleonora Carol

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Technical Research Council  
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### Noriyoshi Tsuchiya

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**The Vernadsky Medal** - awarded for a distinguished record of scientific accomplishment in geochemistry over the course of a career.

**Ebelmen Award** – bestowed to a geochemist of particular merit and outstanding promise less than 35 years old at the time of nomination.

**The Harmon Distinguished Service Award** - bestowed to a deserving candidate to recognize outstanding service by an IAGC member to the Association or to the geochemical community that greatly exceeds the normal expectations of voluntary service.

**The Kharaka Award** - bestowed to two deserving scientists (which may include senior graduate students) from developing countries. The award consists of a framed certificate plus an IAGC membership and *Applied Geochemistry* subscription for a term of three years.

**Jin Jingfu Lecturer** – bestowed to an early career geochemist who has contributed a single geochemical research topic through one or a series of publications resulting in a measurable impact in her or his discipline. The lecture is to be presented at an **IAGC International Conference**.

**IAGC Fellow** - bestowed to a scientist who has made significant contributions to the field of geochemistry.

## Call for Award Nominations

### Nominate your peers and colleagues for 2024 IAGC Awards!

We encourage IAGC members to nominate peers and colleagues who have been of service and made significant contributions to the advancement of geochemistry or to the Association.

You may nominate colleagues for one or more of the numerous [IAGC Awards](#). The nomination period is open from **August 1, 2023** – **December 31, 2023**.

Use the [Award Nomination Cover Sheet](#) and email it to one the Nomination Committee Members to nominate a colleague. Please copy the IAGC Business Office on your email. ([BusinessOffice@IAGC-Society.org](mailto:BusinessOffice@IAGC-Society.org))

**Follow @IAGeoChemistry  
On Twitter for IAGC news  
updates!**



## Memberships available for geochemists in low- and middle-income countries

We strive to provide free memberships for geochemists from **low- and middle-income countries**. We can also provide assistance if your home country makes it difficult or unduly expensive to pay membership dues to the US. These initiatives are generously supported by member donations. As of the time of publishing of this newsletter, there are **130 complimentary memberships** available! If you know geochemist from a [country on the list](#) or otherwise need assistance with the membership fee, [email the Business Office](#) for details.

## Charitable Giving

We are thankful to the following members for their generous donations during the 2022-2023 renewal season to support memberships and student research grants for geochemists from low- and middle-income countries:

Akhtar Jahan  
Alan Shiller  
Alecos Demetriades  
Andrea Johansen  
Andrea Johansen  
Bret Leslie  
Brian Gulson  
Brian Stewart  
Bronwen Wang  
Chamindra Vithana  
Charles Gabriel  
Colleen McLean  
Dirk Kirste  
Dmitrii Kulik  
Donald DePaolo  
Elisa Sacchi  
Eric Hall

Fidelis Akakpo  
Fred Mackenzie  
Hailin Deng  
Iñaki Vadillo-Perez  
Jean Morrison  
Jim Finley  
Joel Brugger  
Jon Fox  
Mark Reed  
Michael Hochella  
Michael Kersten  
Mohamed Ali  
Mohamed Faisal  
Mohsin Raza  
Nancy Hinman  
Nicolas Greggio  
Niklaus Waber  
Oris Ouma  
Owen Missen  
Owolabi Rasaq  
Patrice de Caritat  
Patrick Longmire  
Piyal Halder  
Pradip K. Singh  
Rajesh Kumar  
Robert Langford  
Rona McGill  
Russ Harmon  
Sitangshu Chatterjee  
Steven Banwart  
Stuart Winchester  
Thomas Gimmi  
Veselin Mladeno  
Vladimir Shulkin  
W. Berry Lyons  
Yousif Kharaka

*IAGC is a 501(c)3 non-profit organization and donations to the Society are tax-deductible in the U.S. (EIN: 48-0943367).*

## IAGC Executive Officers

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China University of Geosciences  
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Dirk Kirste  
Simon Fraser University  
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Romain Millot  
(Applied Isotope Geochemistry)  
French Geological Survey (BRGM)  
FRANCE

Rim Trabelsi  
University of Sfax  
TUNISIA

Elisabeth Widom  
Miami University  
USA

Pierpaolo Zuddas  
(Water-Rock Interaction)  
Sorbonne University  
FRANCE

## Other Working Group Chairs (non-council)

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(Global Geochemical Baselines)  
U.S. Geological Survey  
USA

David Long  
(Urban Geochemistry)  
Michigan State University  
USA

Ron Fuge  
(Environmental Geochemistry Chair)  
Aberystwyth University  
UNITED KINGDOM

Olle Selinus  
(Environmental Geochemistry Chair)  
Linneaus University  
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## Renew Your Membership for 2024!

Don't forget to renew your IAGC membership for 2024 by January so you don't miss any issues of *Elements* magazine! Our annual membership is \$40 for professionals and \$15 for students and geochemists from low- and middle-income countries and includes a hard copy subscription to *Elements* magazine as well as online access. Membership also rewards you with lower cost registration rates at IAGC-sponsored working group conferences. Online access to our journal, *Applied Geochemistry*, is also available.

[View IAGC Profile](#)