

European Association of Geochemistry



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BEING A DISTINGUISHED LECTURER DURING PANDEMIC TIMES



Juan Diego Rodriguez-Blanco

In February 2020 I received a very kind e-mail from Alberto Vitale Brovarone [Chair of the Training and Outreach Committee of the European Association of Geochemistry (EAG)] inviting me to be the EAG Distinguished Lecturer 2020. A Distinguished Lecturer travels to institutions in Eastern and Central Europe to give talks at the end of the calendar year, usually during October–November, for one week or 10 days. That was the original plan. Then the coronavirus pandemic began ... and the rest is an ongoing Groundhog Day–style history.



Online viewers at the University of Ljubljana, Slovenia.

I am lucky to work in Trinity College Dublin (Ireland), an institution where all the online teaching infrastructure was already in place years before the coronavirus pandemic. When the first lockdown started, all the lecturers instantaneously moved—surprisingly quickly and smoothly—to full online teaching, without delays. At the same time, it became obvious that the only safe strategy to deliver the EAG Distinguished Lecture Program talks would be by running them online. All the talks were moved to 2021. I designed four talks which were, respectively, about crystallization, calcium carbonates, synchrotron experiments, and rare-earth carbonates: these were given in November 2021. I was delighted to see how well the process worked, with excellent support given by Alberto Vitale and Nadia Malaspina (EAG Training and Outreach Committee) and Marie Aude Hulshoff (EAG Chief Operating Officer).

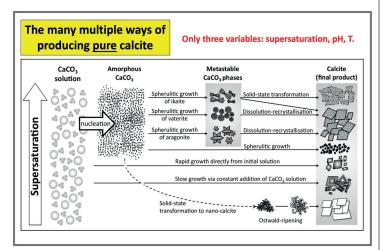


Diagram summarizing the crystallization pathways of pure calcite as a function of starting supersaturation.

I must confess that I do not dislike online talks or conferences. In fact, I like them a lot. They save energy, time, and money, especially to many people who do not have time for long trips or cannot afford travelling. It is easier for postgraduate students to attend. And honestly, I believe that, from now on, the ideal way to give invited lectures by academics should be by using online tools. My experience as the EAG Distinguished Lecturer summarizes why I see more pros than cons in this approach. (1) I was able to reach a larger audience, including people who worked in Europe, Australia, and America. Some of them joined from home at quite late hours. (2) After giving my talks, I got LOADS of questions, most of them written via the chat tool. There is no doubt that this chat option made things much easier for those students who were afraid to ask questions in public. (3) Lectures were very easily recorded, so anybody anywhere can watch them anytime afterwards. (4) Pre-pandemic conferences and talks had large carbon footprints, so moving them online helps a lot to decarbonize conference travel. (5) Finally, and most obviously, online talks are safer, so preventing the spread of COVID-19: there are no health and safety risks nor any limitations in terms of space or number of attendees.

The world has changed, probably forever ... or at least for a long time. As usual. This pandemic is not the first and will not be the last (or worst), but we need to keep in mind that science and technology have given us useful tools to adapt and move forward. Isaac Asimov nailed it when he predicted in 1983 that "The immediate effect of intensifying computerisation will be, of course, to change utterly our work habits". I remember when, decades ago, it was not all that easy to find information (e.g., technical books and documents). Today, this can be done at home with a few clicks—and this is an enormous advantage that we should use, because we will need a literate population to face future challenges and solve very complex problems. I believe we should use adversity as an opportunity to spread science to the public, now more than ever. Curiosity is immune to pandemics and fear.

Juan Diego Rodriguez-Blanco, Trinity College Dublin (Ireland) 2021 EAG Distinguished Lecturer

GLOBAL GEOCHEMISTRY SURVEY

We have an urgent need to better understand the international geochemical community and to advocate for reforms that will shape the future of our discipline. To build knowledge and enhance prospects for all geochemists, we ask you to help by participating in the Global Geochemistry Community Survey. The survey is completely anonymous and takes only 15–20 minutes of your time.



To help us achieve the highest possible participation, please also share access to this survey among your geochemistry colleagues within and outside academia. Geochemists who are not members of the European Association of Geochemistry and/or Geochemical Society are invited to contribute, too. Access the survey at: https:// eag-gs.limesurvey.net/182975.

GEOCHEMICAL PERSPECTIVES LETTERS NEWS

The Geochemical Perspectives Letters editorial board are very pleased to welcome four new editors to the team.



Andreas Kappler is Professor of Geomicrobiology at the University of Tübingen (Germany) where he leads the Tübingen Geomicrobiology Group. The group investigates the role of microbes in mineral formation and transformation and the consequences of these processes on trace metals, nutrients, and greenhouse gases in the environment by using laboratory experiments and field

studies and by applying a variety of analytical techniques, including spectroscopy, (electron) microscopy, and molecular biology.

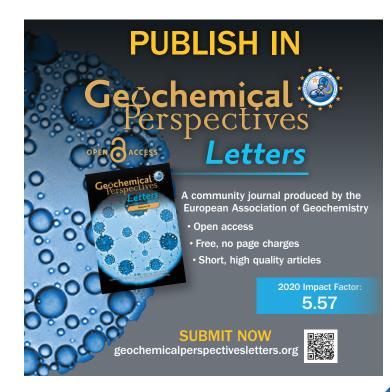


Juan Liu is an assistant professor at Peking University (China). Her research interests include molecular mechanisms of electron transfer at the microbe-mineral interface and related biogeochemical processes, and mineral-water interactions and their influence on mineral transformations and contaminant transformation in environmental and biological systems.



Francis McCubbin is a research scientist and astromaterials curator at NASA's Johnson Space Center (Houston, Texas, USA). His research interests include determining the abundances and roles of volatiles (C, H₂O, F, Cl, S) in magmatic systems within terrestrial planetary bodies and their consequences for the petrological evolution of Mercury, Earth, the Moon, Mars, and the aster-

oids. This work is accomplished through a combination of experimental petrology, mineralogy, and the analysis of astromaterials using a variety of microbeam analytical techniques.





Claudine Stirling is a professor in the Department of Geology at the University of Otago (New Zealand). Her research uses trace elements and their isotope systems to track a wide range of processes on Earth in order to better understand the dynamic interactions between the oceans and the atmosphere during episodes of major climate change. She investigates these processes across a

wide range of timescales, and her research spans the high-latitude regions of the Southern Ocean to the low-latitudes of the equatorial Pacific Ocean.

The board would also like to take this opportunity to thank departing editors, Karim Benzerara, Cin-Ty Lee, Sophie Opfergelt, and **Simon Redfern**, for all their hard work and for their contributions to the success of the journal.

EAG BLOGOSPHERE: DISCOVER ROCK ARCHIVE. **A NEW OUTREACH BLOG**



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Rock Archive is an outreach blog funded by a European Union Marie Skłodowska-Curie Action (MSCA) Fellowship that communicates to the public about the current state of knowledge on Earth's past and present environments. The blog was co-founded in late 2020 by Dr Kärt Paiste, a Marie Skłodowska-Curie postdoctoral fellow at

EAG BLOG

Washington University in St. Louis (USA), and Ichiko Sugiyama, a PhD candidate at the Weizmann Institute of Science (Israel).

The Vision of Rock Archive Outreach

Geoscientists work in the field, in the laboratory, and with computers to better understand Earth's evolving environments. It has become increasingly important to educate the general public about Earth's biogeochemical cycles to help inform them about the impacts of ongoing climate change. The study of geosciences is often overlooked in the K-12 (primary to secondary) educational system. This lack of exposure is among the many factors contributing to the difficulty in increasing diversity in our field. Our goal is to educate the public and inspire them to learn more about rocks, the Earth, and other planets.

To achieve this goal, at *Rock Archive*, we use simple illustrations and language to cover a plethora of topics from 1) the evolution of life and environments on Earth, to 2) the geological tools used to understand Earth history, to 3) how we can use our observations to decipher different processes on Earth (and beyond). The educational materials provided by Rock Archive target a wide range of audiences, from elementary school students and teachers to adults who want to understand more about our planet. We hope that our initiative will help raise public awareness about ongoing research in the geosciences; contribute to diversity, equity, and inclusion (DEI) initiatives; and bring excitement to those interested in the fields of science, technology, engineering, and mathematics.

By Kärt Paiste and Ichiko Sugiyama

Selected posts from Rock Archive will be published on the EAG Blogosphere in the coming months. Read them here: https://blog.eag.eu.com/categories/ rockarchive/