Société Française de Minéralogie et de Cristallographie

www.sfmc-fr.org

EDITORIAL

Dreaming about the future publishing system…

We are still in a transition period, with all its uncertainties and the normal apprehension linked to change. Let us imagine that we have reached a steady state with a single economic publishing system accepted by all. Which one would you prefer?

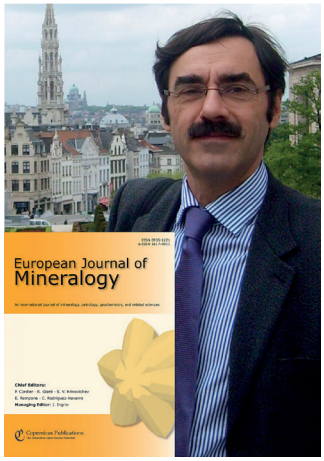
1. The past system where researchers do not have to pay to publish and have access to published work, with the condition that they are at a sufficiently wealthy institution, which is able to pay for the access licenses.
2. The diamond open access system where researchers do not pay themselves for publishing cost (and remain unaware of the costs and resource consumption), but someone else does, and everybody has access to all publications, past and present.
3. The gold open access system where researchers pay the cost of their publications (being fully aware of the costs associated to every single publication), and everybody has access to all publications, past and present.

The first economic system is certainly not the most open, inclusive and fair system. It was also proven to be an unsustainable system with strong economic limitations. As we have seen, constant and uncontrollable inflation of publication costs, led to severe financial problem for many research institutions and libraries.

The second one, the diamond system may appear at first as the most attractive and the fairest one. However, it moves back to the past approach where publishing costs (direct and indirect) are hidden from authors. Some claimed that the bankruptcy of the past system was, in part, due to the fact that researchers where never involved in the financial decisions and were ignorant about them and their consequences. Authors are the main actors in the publishing system and should not remain passive and unaware of the financial questions. It is like residents of a building who do not need to pay the bill for heating costs. Some may even keep the windows open in the winter, especially if they do not even know how much it costs. The hidden costs inherent in the 'diamond' system may repeat some mistakes of the past. Through subsidies, agreements between publishers and institutions, or any other funding systems, the real cost of publications will remain unknown and potentially out of control, which affects the whole research community financially.

The gold open access system offers the possibility for authors to know how much it cost to have their article published in any journal. Personally, I have a preference for this model, as it is most transparent and empowering to authors. As authors have to pay directly the cost of their publications, they are confronted with the consequences of their decisions. Even in the gold open access model, we must remain vigilant. If institutions and libraries propose to sign direct agreements with publishers, shortcutting the researcher's involvement, the role of researchers will again be diminished. Such agreements are complex and it is nearly impossible to estimate individual costs and to regulate global costs. This is probably not the most transparent way to use public funding (i.e., taxpayers' money).

I anticipate your objection: "but, the researchers will have to pay from their research credits...". Not necessarily, if the institutions decide to systematically reimburse the cost of APCs to the researchers. It is a pretty easy decision to take for them. This system has the potential to offer many advantages, for both researchers and institutions. It would need another editorial to fully explore them.



As researchers who publish, we must care about the costs of articles. We need to have an informed understanding of the role we play with the choices we make. Every time we choose to submit an article to a specific journal, we are making a stand on the publishing model that we support.

The gold open system, as we know it, may not be the economic model for publishing that will be finally generalized in the future.

I do not even know if the *European Journal of Mineralogy* (*EJM*) will remain a gold open access journal forever. Notwithstanding, currently it is the fairest and most sustainable system we can propose. It offers transparency and the tools the research community and institutions need to regulate the economic dimension of the publishing system.

J. Ingrin
Managing Editor of *EJM*

INTERNATIONAL ECLOGITE CONFERENCE

10–13 July 2022, Lyon, France

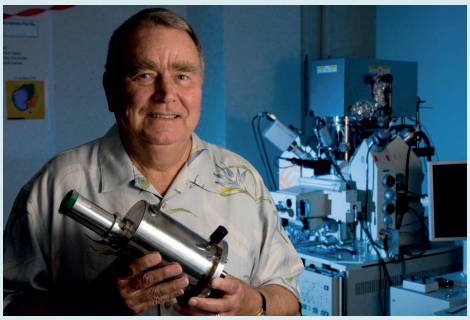
Over the past 40 years, the International Eclogite Conference (IEC) has become a "must go" event for researchers interested in the processes of mountain formation, subduction, and exhumation of oceanic and continental lithosphere, and (ultra)high-pressure metamorphism. After 40 years, it was decided to bring this series of conferences back to France where the first IEC was organized in 1982 and where two centuries ago, in 1822, the mineralogist René-Just Haüy created the name "eclogite", meaning "chosen rock". After a rendez-vous in the *Museum national d'Histoire naturelle* in Paris, "in the footsteps of Haüy", the main meeting was organized at the *École Normale Supérieure* in Lyon, from July 10th to 13th, 2022. Two pre- and post-conference field trips were also organized, respectively, in the Armorican Massif and the Italian Alps.

Unfortunately, circumstances prevented many colleagues, especially Russian and Chinese, from joining the conference, so most of the participants came from Europe and the Americas. About a hundred contributors, including 20 online, made 110 presentations, in the form of talks

Cont'd on page 203

IN MEMORIAM: KLAUS KEIL

I am sad to report that our friend and colleague Klaus Keil passed away peacefully on Friday, February 25th, 2022, at home after a long battle with cancer. He was 87 years old. Klaus was Emeritus Professor, former Director of the Hawai'i Institute of Geophysics and Planetology, and former Interim Dean of the School of Ocean and Earth Science and Technology. Klaus was an outstanding scientist, spectacular mentor, educator, and leader, dedicated family man, and enthusiastic tennis player. His academic and science leadership skills glittered at the University of Hawai'i since 1990, and at the Institute of Meteoritics at the University of New Mexico from 1968 to 1990.



Klaus Keil (December 2008) at HIGP with the original energy dispersive spectrometer (EDS), built and published by R. Fitzgerald, K. Keil and, K.F.G. Heinrich in Science in 1968. Image: SOEST.

Klaus was a pioneer in the use of the electron microprobe in meteoritics and in petrology and mineralogy in general. In the early 1960s, he worked with colleagues at NASA Ames Research Center, Ray Fitzgerald and Kurt Heinrich, to make the first energy dispersive X-ray spectrometer for use in microanalysis. This device was the first to focus on terrestrial and extraterrestrial geological materials, and the first to use a solid-state lithium-drifted Si detector. Over his long and illustrious career, Klaus studied practically every type of meteorite and lunar sample, addressing big problems in planetary science, from chondrule formation to pyroclastic eruptions on the Moon and achondritic bodies, from asteroid disruption to the composition of the Martian surface.

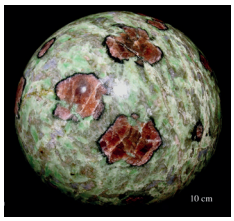
His accomplishments were recognized through awards of the Leonard Medal from the Meteoritical Society, the J. Lawrence Smith Medal of the National Academy of Sciences, and election as a Legends Fellow of the Microanalysis Society, in addition to numerous other accolades including the main belt asteroid Keil and the extraterrestrial mineral keilite, (Fe,Mg)S, named in his honor.

A long time ago someone told me, with astonishment in his voice, "Everything Klaus touches turns to gold." Klaus was an alchemist. He made his own gold through his imagination, ability to synthesize diverse data, hard work, and the ability to motivate research in his group. The real gold, though, goes to all of us who benefitted from his research, leadership, and mentorship, especially those of us who have had the pleasure and honor to work with him and to be his friend.

Jeff Taylor

Cont'd from page 201

or posters, on a wide variety of topics: eclogites and their geodynamic meaning; extreme metamorphism and mantle eclogites; *P–T–X* conditions estimated from crystal chemistry, experimental petrology, and thermodynamics; rheology and deformation at high-pressure (HP) conditions; geochemistry and fluid–rock interactions; and geochronology and ancient eclogites.



Billiard ball, La Compointrie (Saint-Philbert-de-Grand-Lieu) Kyanite eclogite

It is difficult and quite subjective to summarize the outcomes of such diverse contributions. Over the last 40 years, we have enjoyed a golden age of quantification that has led to remarkable advances in the determination of the *P–T–t* evolution of HP rocks; we have also experienced a race to the depths, with the discoveries of deeper and deeper HP minerals, such as coesite and diamond. One could think that the characterization of *P–T–t* paths is now largely routine, but IEC-14 contributions on, e.g., elastic thermobarometry and high-resolution mineral dating attest to the contrary. New research seems to be moving towards issues that have remained quite marginal until now, such as partial melting under HP conditions, the disputed role of tectonic overpressure and stress, the significance of disequilibrium features in terms of kinetics, fluid flow, and its rheological consequences.

Contributions will be presented in a special issue of the *European Journal of Mineralogy*, now open for submissions.

The next IEC is set for 2025 in California.

Samuel Angiboust and **Gaston Godard**
Website: https://iec14.sciencesconf.org/

IEC Merit Awards 2022: Best Talk and Best Poster

Two distinctions were awarded during the International Eclogite Conference.

- **Best talk**: T. A. Markmann presented a petrogeochemical model perspective on the interplay between rock transformation and aqueous fluid production in subduction zones. This study is in collaboration with P. Lanari.
- **Best poster**: J. F. Vieira Duarte, on oxide-silicate petrology and geochemistry of subducted hydrous ultramafic rocks beyond antigorite dehydration (Central Alps, Switzerland). This project is in collaboration with T. Pettke, J. Hermann, and F. Piccoli.

From left to right: J. Gilotti and S. Cuthbert (committee members); S. Angiboust, T. A. Markmann, G. Godard, and C. Chopin (organizing committee).

Left: T. Pettke receiving the prize on behalf of J. F. Vieira Duarte from S. Angiboust (organizing committee)