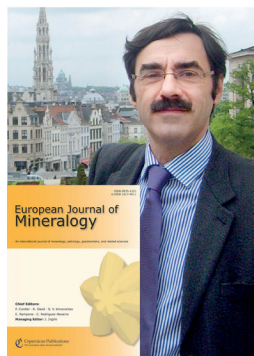


EDITORIAL

Should we continue to let the length of introductions increase in specialized scientific articles?



The nature of introductions in scientific articles has changed through the years. Thirty years ago, they were short and focused on a description of the current state of the art, concisely presenting the objectives of the article. Now, they are longer and more or less a review of the broad subject, becoming increasingly repetitive to read.

To factually assess the changes in the length of introductions, I compared the introductions of articles published in the *European Journal of Mineralogy* (EJM) in vol. 1 (1989) and in vol. 31 (2019). A total of 66 research articles were published in vol. 1, and 84

were published in vol. 31. I disregarded review papers to avoid bias. The average length of introductions in 2019 was more than 60% longer than that in 1989 (598 versus 371 words). The difference is significant and not due to the specificity of the year. The same trend is observed if we consider, for instance, years 1990 and 2018. Why this change? It may appear paradoxical considering that authors publish on average more articles per year than in the past. Therefore, shorter papers and shorter introductions could have been expected. However, the opposite is observed. Why have we become so prolix, and what are the impacts?

I looked at the nature of the changes in articles with particularly long introductions (over 800 words). They generally present an extensive review of the subject or/and try to justify the broad impact of the study. One could discuss whether it is necessary to develop an exhaustive review every time we publish an incremental research article in a specialized journal. Except in the case of a new topic or field, the community knows the subject well. In addition, dedicated review papers are regularly published to help new researchers in the field. Therefore, it is somehow questionable to develop extended reviews of the subject each time when publishing new results. Publications in specialized journals should not have to describe the subject for a general audience. There is also no need to explain *a posteriori* the broad interest of the study because the project has already been funded and funding institutions do not use such explanations as criteria to assess success.

The first impact of increasing introduction lengths is that there is a duplication of information. As a direct consequence, we now read introductions with less interest and much less care. A second impact is that it contributes to an inflation of the number of citations. The average number of citations per article has increased by 49% in the last 30 years in EJM (1989–2019). As the number of scientific publications has continuously increased during these years, this is to be expected. However, more surprisingly, during the same period of time, the average number of citations in the introductions alone has increased by 97%. We should therefore question the necessity of these citations, especially if this part of the articles is less read and somehow redundant.

I think it is time to come back to more sober introductions and limit this growing noise. There is no added value to produce texts that no one reads. Everyone could benefit from a more succinct approach: reviewers would have less pages to read to assess the introduction, the editor less volume to typeset and copy-edit, the readers would more easily identify the relevant scientific information, and finally the authors would spend less time writing and proofreading.

J. Ingrin, Managing Editor of EJM

EARTH MANTLE WORKSHOP – TOULOUSE

12–15 September 2022



EMW participants in Toulouse.

The fourth edition of the international symposium “Earth Mantle Workshop: EMW 2022” organized by members of the GET laboratory (CNRS-CNES-IRD-Toulouse III University) was held in Toulouse on 12–15 September. The symposium brought together around 90 specialists, including more than 30 PhD students studying the petrology, chemical composition, and geodynamic evolution of the Earth’s mantle. Participants came from more than 10 countries, including Australia, Italy, Germany, Spain, Poland, and Greece.

The meeting ended on 15 September with a field excursion near the Etang de Lers (in Ariège), a place known worldwide for having given its name to the main rock type of the Earth’s mantle, lherzolite.



(TOP) View of the étang de Lers with surrounding peridotite. (BOTTOM) Field excursion participants looking for garnets within the local “Ariégite”, which is a garnet pyroxenite.

JOINT CONTRIBUTION
FROM THE SFMC AND METEORITICAL SOCIETYHAPPY 100th BIRTHDAY MADAME CHRISTOPHE!

Mireille Christophe Michel-Lévy, “Madame Christophe,” celebrated her 100th birthday last September. Daughter of Albert Michel-Lévy (1877–1955), professor of petrography at the Sorbonne, and granddaughter of Auguste Michel Lévy (1844–1911), who held the Chair of Geology at College de France, she is probably one of the most important extraterrestrial mineralogists alive. She started her career in 1946, working mainly on mineral synthesis as well as on natural minerals from a variety of localities in France and abroad. During her professional life, she held a permanent CNRS position in the Mineralogy Laboratory of the Sorbonne. Her scientific contributions appeared mainly in the *Bulletin de Minéralogie*, *Earth and Planetary Science Letters*, and *Meteoritics*. She wrote in French or English but, as many scientists of that era, was also able to read Russian, German, and Italian.

Her first papers on meteorites were published in the mid-1960s. She studied the mineral merrillite and a chondrule in the Nadiabondi chondrite with an electron microprobe. At the time, the electron microprobe was a relatively new instrument and not so many Earth scientists were able to use it to provide sound data. Though educated as a classic mineralogist, Mireille Christophe Michel-Lévy always maintained a keen interest in new instrumentation. Later on in her career, she was one of the first scientists to use Raman spectroscopy to study carbon in extraterrestrial matter.

Mireille Christophe Michel-Lévy's main achievement was the discovery of calcium-aluminum-rich inclusions (CAIs). In 1968, she published a paper in her favorite *Bulletin de Minéralogie*, in which she described (in French) what she called an exceptional chondrule in the Vigarano meteorite. Fallen in 1910, the Vigarano meteorite had hardly been studied before. In a thin section made and still kept at the Paris Natural History Museum, she identified an unusual millimeter-sized chondrule, which she investigated with a variety of techniques, including optical microscope, electron microprobe, and X-ray diffraction. In that “chondrule,” she identified titaniferous spinel, melilite, and a titanium oxide interpreted to be rutile or perovskite. In addition, she observed a reaction rim made of spinel and other minerals too fine-grained to be identified. What she had discovered was refractory inclusions surrounded by what was named a decade later a Wark-Lovering rim. Refractory inclusions, also called CAIs, are among the most studied meteorite components. They are the first solids to have formed in

the Solar System and have since been dated at 4567 My before present. Fascinatingly enough, Christophe Michel-Lévy did not content herself with describing the unusual chondrule from Vigarano. She also understood that it had formed by condensation in the early Solar System. Unfortunately, Christophe Michel-Lévy is rarely quoted for that key discovery.



Mireille Christophe Michel-Lévy circa 1968, at the time of the refractory inclusions discovery. IMAGE KINDLY PROVIDED BY JEAN-CLAUDE LORIN. CREDIT: JEAN-LOUIS BERDOT.

She made many other important contributions, such as the first description of fassaite, a titanium-rich clinopyroxene, and the first report on the occurrence of grossite in meteorites. These two minerals are abundant in refractory inclusions. In addition to a large variety of meteorite groups (e.g., ordinary, carbonaceous, enstatite chondrites, eucrites), Christophe Michel-Lévy also worked on lunar samples and, at the end of her career, on the then newly collected micrometeorites.

After she retired in the early 1990s, Madame Christophe came regularly to her laboratory in Jussieu and she continued publishing until her last contribution on the Alfianello chondrite. She now lives in Brunoy, close to Paris. We wish her a very happy 100th birthday.

Matthieu Gounelle

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