



Mineralogical Society of the UK and Ireland

www.minersoc.org

ASK NOT WHAT YOUR SOCIETY CAN DO FOR YOU...

Well, maybe let's start there. We can come to the second half of that famous JFK quote further down.

Elements Magazine is the essence of how members of a community can come together to make something greater than the sum of its parts. *Elements* is published by 18 societies and four affiliated international umbrella organizations. It is definitely a magazine by the community, for the community.

Another major achievement of cooperation has been our journal partnership with GeoScienceWorld. This is geological rather than just mineralogical, but it serves an enormous international audience with value-added search capacity and other interrogation tools that enhance the value of our individual journals.

AND WHAT DOES YOUR SOCIETY DO FOR YOU?

Meetings

We have many examples of this sense of cooperation: the conferences of the International Mineralogical Association and the Association International pour l'Etude des Argiles, which oversee the International Clay Conferences (and previously the European Clay Conferences), and the European Mineralogical Union, which oversees the European Mineralogical Conference series. There are many other such conferences, including those run by fellow *Elements* adherents, but this selection is uniquely designed to support the communities they serve, in this writer's opinion. The Mineralogical Society has run all four of the major international mineralogical conferences (IMA in 2002, Euroclay in 2015, EMC in 2024, and ICC in 1978 and 2025). This is one of the things we do to support our community. These events are designed to allow the greatest scientific experience possible for all of its delegates and which seek to be open to and inclusive of those who might not otherwise enjoy the experience of joining such an event.



XVIII ICC
Dublin, Ireland
13-18 JULY 2025



Journals

We publish three journals (in partnership with excellent colleagues at Cambridge University Press). Our aim is to publish as quickly as possible the best quality research and other papers. As an author, you will receive high-quality reviews and benefit from careful production and be assured that your paper is available to the widest possible audience to read. Cambridge offers APC (open access charge) waivers to many authors from developing countries and operates 'Read and Publish' deals with thousands of institutions around the world, which means that many authors will not need to pay additional funds to publish their work open access. Our journal content is also available through GSW (as mentioned above), further extending the reach of the content.

Membership

Why do we have membership? Member fees for most Societies are very affordable. If you are a student, membership of the Mineralogical Society, for example, probably costs less than a night at the cinema (if you take the popcorn and fizzy drink into account ☺). People used to join societies so they could receive a personal printed copy of that organization's journal(s). This is no longer an attraction as most journals no longer print on paper. We now look to attract members so that we can serve their scientific needs in terms of meetings, online events,

grants, awards, networking, community, and much more. There is no doubt that in the MinSoc, members receive far more in terms of services than is paid in membership dues.

Current rates are £55 for professional members, £30 for Early Career Members (within 10 years of award of your final degree), £30 for special interest group committee members, and £19 for student members (but note that we offer free student membership for the first **three** years (!)). Why wouldn't you join?!

Awards

Our community seeks to reward those who excel at what they do: this includes scientific excellence in the form of published work, or in terms of presentations at conferences. It also includes those who excel at teaching, at outreach, at supporting EDI initiatives; and those who have made a significant contribution to industry or government. This broader remit is now cemented into all Mineralogical Society (of UK and Ireland) Awards so go and have a look. And then, pause, and think about who to nominate. Or even nominate yourself (<https://www.minersoc.org/awards.html>).

...ASK WHAT YOU CAN DO FOR YOUR SOCIETY

What do we ask of our members and those who associate with it?

1. Support our journals: review a paper if asked or submit a paper (this is critically important to the future health of our organization—think which Society/journal has supported you in your career and think about this action, which will ensure its future survival).
2. Support our special interest groups: serve on a committee, attend their meetings (in person or remotely), offer to present your work, mentor a student or early-career colleague.
3. Recommend membership to your colleagues and students. It's great value and a very friendly group.
4. Nominate a colleague (or yourself) for one of our awards. In particular, look at the new criteria. They just became more accessible and open.

Kevin Murphy
Executive Director

AWARDS

Go to www.minersoc.org/awards and read our new criteria. Here are the criteria for the Neumann medal, for example:

The Neumann Medal will be awarded annually to a scientist who, during a long and active career, has made an outstanding contribution to applied mineralogy, clay mineralogy, environmental mineralogy, geochemistry, geomicrobiology, metamorphism, mineral physics, or volcanology and magmatic studies, reflecting the diverse and worldwide interests and membership of the Society. Evidence of such excellence should be in the form of the impact of the applicant's/nominee's work, their publications, service to industry, outreach/promotion of science, leadership or other service to the community, teaching, and work to improve equality, diversity, and inclusivity in our science.' Nominees/applicants do not have to be Members of the Mineralogical Society or nationals of the UK or Ireland.



DYNAMIC EARTH: GEOCHEMICAL AND BIOSPHERIC INTERACTIONS ACROSS TIME

A meeting of the International Society for Environmental Biogeochemistry

Trinity College Dublin
27–31 October 2025



The website for this meeting can be found at <https://www.iseb-2025.org/> and online registration is now open. The general themes will be:

- Microbial Processes in Biogeochemical Cycles
- Geomicrobiology Across Environments
- Microbial Responses to Anthropogenic and Climate Pressures
- Innovative Approaches in Biogeochemistry and Geomicrobiology
- Historical and Paleo Perspectives in Microbial Biogeochemistry

The local organizing committee will be chaired by Ernest Chi Fru (Cardiff University) and will include representatives from the MinSoc's Geomicrobiology Network. Logistical arrangements will be made by the Mineralogical Society.

RECENT CONTENT IN OUR JOURNALS

Badalovite, $\text{NaNaMg}(\text{MgFe}^{3+})(\text{AsO}_4)_3$, and associated calciojohillerite, $\text{NaCaMgMg}_2(\text{AsO}_4)_3$, from Biancavilla, Etna volcanic complex, Sicily, (Italy): occurrence and crystal chemistry Daniela Mauro, Jiří Sejkora, Zdeněk Dolníček

IMA Commission on New Minerals, Nomenclature and Classification (CNMNC) – Newsletter 83 Ferdinando Bosi, Frédéric Hatert, Marco Pasero, Stuart J. Mills

Crystal structure and vibration spectra of norsethite-type $\text{BaMg}(\text{CO}_3)_2$ - $\text{BaMn}(\text{CO}_3)_2$ solid-solutions Wen Liang, Jie Bai, Lin Li, Zengsheng Li, Yong Meng, Kaixiang Liu, Peer-Lennart Gehlken, Michael Ernst Böttcher

Crystal structure and high-temperature transformation of $\text{RbAlGe}_3\text{O}_8$, a germanium analogue of rubicline, $\text{RbAlSi}_3\text{O}_8$ Liudmila A. Gorelova, Maria G. Krzhizhanovskaya, Valentina A. Yukhno, Olga Yu. Shorets, Oleg S. Vereshchagin

Discovery of terrestrial rubinite, $\text{Ca}_3\text{Ti}^{3+}2\text{Si}_3\text{O}_{12}$, super-reduced garnet from the Hatrum Complex, Israel Evgeny V. Galuskin, Irina O. Galuskina, Joachim Kusz, Yevgeny Vapnik, Grzegorz Zieliński

The minerals of the kröhnkite supergroup: structural relations and chemical compositions Frank C. Hawthorne

Hidden mineral treasures in rust samples of the Muonionalusta iron (IVA) meteorite Alice Taddei, Dan Holtstam, Luca Bindi

Tarutinoite, $\text{Ag}_3\text{Pb}_7\text{Bi}_7\text{S}_{19}$, a new member of the lillianite homologous series from the Tarutinskoe copper-skarn deposit, Southern Urals, Russia Anatoly V. Kasatkin, Cristian Biagioni, Fabrizio Nestola, Radek Škoda, Vladislav V. Gurzhiy, Atali A. Agakhanov, Aleksey M. Kuznetsov

Exploring reverse silicate weathering across geological time: a review Andre Baldermann, Santanu Banerjee, Stefan C. Löhner, Maxim Rudmin, Laurence N. Warr, Arpita Chakraborty



Synthesis of nano-metakaolin using mechanical activation: effects of various parameters on the activated material properties Dimitra Kosmidi, Konstantinos Betsis, Lefkothea Sakellariou, Maria Taxiarchou, Efstratios Badogiannis, Sofia Makri

The effect of different exchangeable cations on the CO_2 adsorption capacity of Laponite RD® Minh Hoang Nguyen, Liva Dzene, Simona Bennici

Bruce Velde (1938–2024) – obituary Bruno Lanson

The acid-leaching process and structural changes of lizardite, chlorite and talc in sulfuric acid medium Dingran Zhao, Hongjuan Sun, Tongjiang Peng, Li Zeng, Mengji Wu

Dispersant assisted rotating liquid film reactor separation strategy for low-grade palygorskite purification with improved dye absorption performance Qihui Wang, Xiaoli Liu, Chao Jiang, Xingpeng Wang, Linlin Wu, Huiyu Li, Weiliang Tian, Yongjun Feng

Ternary geopolymer with calcined halloysite: impact on mechanical properties and microstructure Ting Yu, Baifa Zhang, Jiarong Chen, Mohammad Fahimzadeh, Thammaros Pantongsuk, Xiang Zhou, Peng Yuan

Sustainable approach to raw clays for ceramic and refractory applications: insights from updated traditional ternary diagrams – CORRIGENDUM Milica V. Vasić, Pedro Muñoz Velasco, Nevenka Mijatović, Milena Radomirović, Zagorka Radojević

The crucial and versatile roles of bacteria in global biogeochemical cycling of iodine Zhou Jiang, Yongguang Jiang, Yidan Hu, Yiran Dong, Liang Shi

Microbial extracellular polymeric substances (EPS) in soil: from interfacial behaviour to ecological multifunctionality Ming Zhang, Yichao Wu, Chenchen Qu, Qiaoyun Huang, Peng Cai

Influence of crystal shape and orientation on the magnetic microstructure of bullet-shaped magnetosomes synthesized by magnetotactic bacteria András Kovács, Mihály Pósfai, Benjamin Zingsem, Zi-An Li, Péter Pekker, Jan Caron, Sandra Prévéral, Christopher T. Lefèvre, Dennis A. Bazylinski, Richard B. Frankel, Rafal E. Dunin-Borkowski

Magnetite nanoparticles are metastable biogeobatteries in consecutive redox cycles driven by microbial Fe oxidation and reduction T. Bayer, N. Jakus, A. Kappler, J. M. Byrne

Bacterial toxicity of sulfidated nanoscale zerovalent iron in aerobic and anaerobic systems: implications for chlorinated solvent clean-up strategies Adrian A. Schiefler, Nina Tuxen, Sathish Mayanna, Liane G. Benning, Dominique J. Tobler

