



# Mineralogical Society of the UK and Ireland

[www.minersoc.org](http://www.minersoc.org)

## HAPPY 2025 TO ALL!

Best New Year wishes to all our members and *Elements* readers. It's going to be another busy year at the Mineralogical Society.

### New Membership offers

Are you an Early Career Researcher? If so, you'll be pleased to hear that the Mineralogical Society is now offering a reduced rate of membership: **£30**. This is a little more than half of the full rate of membership of £55. So, if you fall in the category of 10 years since the award of your final degree (and we allow for career breaks, etc.), you qualify for ECR Membership. The Society's council seeks to recognize the financial challenges of those in a first job, or perhaps seeking a first job, in offering this reduced membership fee.

Our student rate continues at just £19. And this doesn't kick in until you have taken up your free **three years of membership**. Yes, our free membership offer has been extended from one year to three!

(Re-)Join now at <https://www.minersoc.org/join-now.html> or contact Russell Rajendra ([russell@minersoc.org](mailto:russell@minersoc.org)) for details.

### International Clay Conference 2025 – Sustaining Clays



Following the fantastic success of the European Mineralogical Conference during summer 2024, we now move on to hosting the International Clay Conference for 2025. This will be held at Trinity College Dublin from 13–18 July 2025. If you haven't already done so, go to <https://icc.aipea.org/> for more information and to register. We guarantee a warm Irish welcome in Dublin.



**XVIII ICC**  
Dublin, Ireland  
13-18 JULY 2025

This is the list of proposed sessions at the time of writing (early December 2024). This list covers a very comprehensive range of science, including material and environmental science.

- Universal Session
- Natural Zeolites: From Geology and Fundamental Science to Applications and Market Challenges
- Phyllosilicates in Asteroids and Meteorites: Identification and Characterization of Phyllosilicate Assemblages
- Identification and Characterization of Phyllosilicates on Mars through Remote Sensing, Rover Instruments, and Analog Studies
- The Role of Layered Minerals in the Origin of Life – Insights from Terrestrial and Extraterrestrial Environments
- From Dioctahedral to Trioctahedral Smectites: Where Volcanism meets Weathering, Sedimentation and Diagenesis
- Teaching, History, and Future of Clay Mineralogy (in honor of Dewey Moore and Bruce Velde)
- Origin and Age of Clay Minerals in Soil and Sediment, Soil and Clay Chemical Analysis – Symposium Honoring M.L. Jackson
- Critical Minerals in Clay-rich Deposits: Processes, Occurrences, and Resource Potential
- Clay Minerals as Lithium Sources and Sinks
- Advances in Structural Characterization of Layered Compounds Clay Applications in Ceramics

- Materials via Ordered Interstratifications
- Exfoliation of Clay Minerals – Key Route to Industrial Applications
- Intercalation: From Fundamental Insights to Practical Applications
- Industrial Application of Clays
- Clay Minerals in Diagenetic and Low-Grade Studies: Implications for Resource Exploration and Sustainable Energy Development
- Smectite Layer Charge and Interlayer Environment: Structure, Alteration, and Environmental and Technological Significance
- Impact of Temperature on Bentonite Barrier Systems Based on Findings from In-situ Experiments in the Context of Radioactive Waste Disposal
- Science and Engineering of Clays for Nuclear Waste Disposal
- Clay Mineral-Based Catalysts for Environmental Engineering and Chemical Processes
- Greenhouse Gas Remediation
- Fundamentals of Tubular Nanoclays
- 1D Nanoporous Clay Materials and Their Industrial Applications
- Multiscale Computational Modeling of Clay-related Materials and their Fluid Interfaces
- Nanoelectronic and Nanophotonic Applications
- Properties and Applications of Novel Smart Clay and Clay-related Nanomaterials
- Clays in Geotechnics – Problems and Applications
- Clays in Mining
- Advances in Calcined Clays as Supplementary Cementitious Materials in Blended Cements
- Sustainable and Eco-friendly Clay-based Materials
- Mechanical and Mechano-chemical Activation of Clays
- Synthesis of Geo-inspired Clay Minerals and Associated Hybrids
- Navigating the Regulatory Landscape in the Global Clay Industry
- Analytical Challenges in the Clay Industry
- The Role of Clays in Human Health and Biomedical Sciences
- Clay Materials in Healthcare Technologies
- Effect of Chemical Reactions on Clay Minerals and/or Clayey Porous Media Properties
- The Role of Minerals and Mineral Weathering in Carbon Sequestration in Soils
- Clays and Climate: Past, Present, Future
- Clay Minerals and Soil based Ecosystem Services
- Applications of Natural Clays and Clay Minerals for Environmental Remediation and Treatment
- Synthesis and Applications of Modified Clays in Environmental Remediation
- Studying the Mineralogy of Clays to Meet the Current and Future Challenges of the Critical Zone
- Interactions of Iron-rich Clays and Iron Oxides with Organics and Heavy Metals: Implications for Iron/Carbon/Metal Cycling

Here are the conference registration fees:

Category	Virtual	In person
Regular AIPEA Member Professional	€335	€580
Non-Member Professional	€375	€620
Student/Emeritus	€230	€370
One-day		€295
Colleagues from low- and middle-income countries	€0	€580
Abstract submission	€25	€25

## Website

It's time for another visit to our website! It had a revamp during 2024 and looks fresh and new. It now incorporates all of the new work done on membership, awards, and meetings in terms of how they relate to Equality, Diversity, and Inclusivity.

The new version of the site also has much better access to our extensive and growing list of content on our YouTube channel. See the link from our home page (diagram below).

## Skills and Training

Also indicated in the figure is the access point to our Skills and Training initiative. See the list of events lined up for 2025.

## Upcoming SIG events

### Geochemistry Group Research in Progress (GGRiP) 2025

The 2025 edition of the GGRiP meeting will take place at the University of Birmingham from 9–11 April 2025. Further information is available from the website at <https://geochemistry.group/research-in-progress-meeting/>.

### MSG RiP 2025

The Metamorphic Studies Group Research in Progress meeting for 2025 will be held at the University of Liverpool from 8–11 April 2025, organized by Dr John Wheeler. Details at <https://metamorphicstudiesgroup.wordpress.com/>.



## New content in Mineralogical Magazine

**Strontiorobrite: revalidation as a mineral species and new data** Igor V. Pekov, Natalia V. Zubkova, Nikita V. Chukanov, Vasily O. Yapaskurt, Sergey N. Britvin, Dmitry A. Ksenofontov, Dmitry Yu. Pushcharovsky

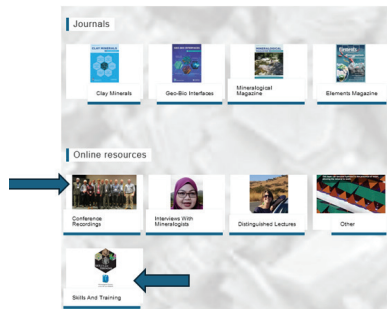
Jack Zussman 1924–2024 Richard Patrick

**Rundqvistite-(Ce),  $\text{Na}_3(\text{Sr}_3\text{Ce})(\text{Zn}_2\text{Si}_8\text{O}_{24})$ , a new mineral from the Darai-Pioz alkaline massif, Tien-Shan Mountains, Tajikistan: mineral description and crystal structure** Atali A. Agakhanov, Maxwell C. Day, Elena Sokolova, Vladimir Yu. Karpenko, Frank C. Hawthorne, Leonid A. Pautov, Anatoly V. Kasatkin, Igor V. Pekov, Vitaliya A. Agakhanova

**Xenotime-(Gd), a new Gd-dominant mineral of the xenotime group from the Zinná Voda REE–U–Au quartz vein, Prakovce, Western Carpathians, Slovakia** Martin Ondrejka, Peter Bačík, Juraj Majzlan, Pavel Uher, Štefan Ferenc, Tomáš Mikuš, Martin Števko, Mária Čaplovičová, Stanislava Milovská, Alexandra Molnárová, Christiane Rößler, Christian Matthes

**Thorium speciation in titania slag: Implications for environmental remediation and valorisation** K. Chadirji-Martinez, G. Hudon, R. Chernikov, E. Heredia, R. Feng, A. Crawford, Y. Pan

**Comparative thermal and compressional behaviour of natural xenotime-(Y), chernovite-(Y) and monazite-(Ce)** Francesco Pagliaro, Davide Comboni, Tommaso Battiston, Hannes Krüger, Clivia Hejny, Volker Kahlenberg, Lara Gigli, Konstantin Glazyrin, Hanns-Peter Liermann, Gaston Garbarino, G. Diego Gatta, Paolo Lotti



**Mineralogy and genetic considerations of the metamorphosed As-rich manganese ore mineralisation at the Diely occurrence near Poráč (Northern Gemeric Unit, Western Carpathians, Slovakia)** Pavol Myšľan, Martin Števko, Tomáš Mikuš, Luboš Vrtiška

## New content in Clay Minerals

**The mineralogical composition of the zeolitic rocks of Santorini Island and their potential use as feed additives and nutrition supplements** Christina Mytigliaki, Soultana Kyriaki Kovaïou, Dimitrios Vogiatzis, Nikolaos Kantiranis, Anestis Filippidis

**Origin and distribution of clay minerals in semi-arid Sahelian soils: case of Kori Ouallam watershed, south-western Niger** Salifou Noma Adamou, Lahcen Daoudi, Amadou Abdourhamane Touré, Nathalie Fagel

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

**Safranin removal by fine soil: thermodynamics and kinetics of adsorption** Iraj Dehghanpour, Ghazaleh Kouchakzadeh

**Stability performance of an Algerian Ni/purified diatomite catalyst in the dry reforming methane reaction: characterization and properties** Massinissa Adjissa, Nedjima Bouzidi, Kahina Ikkour, Salim Ouhenia, Ouarda Benlounes, Nouara Lamrani

**Climatic significance of clay minerals in Cenozoic marine and lacustrine sediments** Nathalie Fagel

Dr Ian Wilson, 1943–2023 Simon J. Kemp, Stephen Hillier

**Influence of the clay fractions from various horizons on the radiation shielding parameters of an Arenosol** Luiz F. Pires, Victor A. Yanagisawa, André M. Brinatti, Sérgio C. Saab, Vladia Correchel

## New content in Geo-Bio Interfaces

**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

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

**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 Prévèral, Christopher T. Lefèvre, Dennis A. Bazylinski, Richard B. Frankel, Rafal E. Dunin-Borkowski

**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

