Mineralogical Society of Great Britain and Ireland

www.minersoc.org

MINERALOGICAL SOCIETY WELCOMES NEW GENERAL SECRETARY, DR JANA HORÁK

This is my first communication as the new General Secretary of the Mineralogical Society of Great Britain and Ireland (MSGBI). It is a great honour to be taking up this post, although I do this with some trepidation, following the sterling work of the past general secretary, Kathryn Goodenough. One of the many contributions Kathryn made, while working with the Executive Director, was to support and nurture the Society's eight Special Interest Groups (SIGs). The success of these is the life-blood of the society, contributing a vibrancy and providing a valuable network for researchers, both in established fields of research and newer ones. The oldest, the Applied Mineralogy Group, was formed over 50 years ago, and the newest, the Geomicrobiology Network, was inaugurated just three years ago. These groups also provide a platform for students to present their work at specialist meetings, often supported by bursaries from the SIGs, and thereby nurture a new generation of mineral scientists.

So, while the SIGs currently support the health and sustainability of the MSGBI and its membership, it is also important that we consider the external perception of mineralogy in society. This is not just so that we sustain the subject academically through future generations, but also so that the wider public has an appreciation and understanding of the resources and materials that sustain our everyday lives. It is such information that allows them to make better informed decisions about how we use these resources and their social and environmental impact.

Society, in general, needs scientific literacy. Such literacy is not usually high, however, and seems particularly low in mineralogy. It was with a mixture of surprise and despair that I watched an episode of the BBC's *University Challenge* television program where highly capable university students failed to correctly answer simple questions on common minerals from very simple descriptions. This is not an isolated incident. My job as Head of Mineralogy and Petrology at the National Museum of Wales means that I am heavily involved in public engagement, either face-to-face or managing engagement projects. It is not uncommon to be confronted with members of the general public who are attracted to, and clearly interested in, minerals, but who have little understanding of mineral compositions, how minerals formed or anything actually relating to minerals!

Nevertheless, it is always possible to find a common thread that can spark a layman's interest. I feel that it would be a wonderful aspiration if, alongside the academic activity of our various aspects of mineralogy, we can attempt to communicate the science wherever possible and, perhaps, to consider ways in which we could do this in a more joined-up fashion. In today's busy world, this is perhaps a big task. But public engagement is now acknowledged by UK research councils as a valuable component of research projects, so perhaps we should view this as an investment in sustaining mineralogy in the future.

NEW BOOK PUBLISHED IN THE EUROPEAN MINERALOGICAL UNION NOTES IN MINERALOGY SERIES

A new title in the EMU series has been published: *Mineral Reaction Kinetics: Microstructures, Textures, Chemical and Isotopic Signatures*, edited by W. Heinrich and R. Abart.

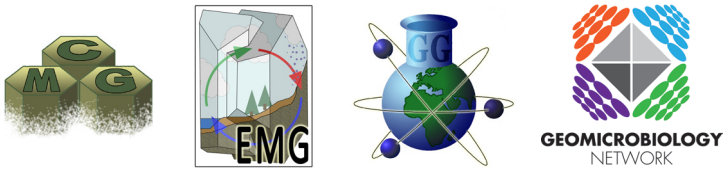
In the late 20th century, advances in experimentation and in material characterization greatly fostered the development of internally consistent thermodynamic data. Together with the development of thermodynamic modelling tools, this enhanced our ability to analyse phase equilibria in rocks and to obtain accurate quantitative information on the conditions of magmatic and metamorphic crystallization. This gave an unprecedented boost to mineralogy, petrology and geochemistry and helped illuminate long-standing questions in geodynamics, as well as in geo- and cosmochemistry. The attainment of thermodynamic equilibrium among the phases that constitue a given rock and the metastable preservation of those equilibrium phase relations—indispensable pre-requisites for applying equilibrium thermodynamics—could now be demonstrated or, at least, tacitly assumed.

The aim of this volume, which arose from an EMU 'School' held in Vienna in September 2016, is to provide a methodologically sound insight into the theoretical foundations of mineral reaction kinetics; to help students and others become acquainted with contemporary methods in experimentation and analytical techniques; and to give worked examples that illustrate recent geoscience advances based on an improved characterization and understanding of mineral and rock systems.

The book is available from the Mineralogical Society online bookshop: www.minersoc.org (click on bookshop) at a price of £55 (institutions) and £40 for individuals (+ shipping). It is also available from the MSA Online bookshop and from Amazon.co.uk and Amazon.com.

MEETING: "REDOX-ACTIVE MINERALS IN NATURAL SYSTEMS"

Clay Minerals Group, Geomicrobiology Network,
Environmental Mineralogy Group, Geochemistry Group



of the Mineralogical Society

University of Manchester, UK
21–22 June 2017

For several centuries, mineralogy has been dealing with the occurrence, classification and description of materials that appear in nature as rocks. Recent advances in analytical techniques, such as X-ray and neutron diffraction, and in computational power have enabled accurate identification of crystal structures and atomic-scale simulations of the mineral behaviour. These advancements have led to a

greater understanding of the relationships between the atomic-scale structure of minerals and their function under different environmental conditions. Modern mineralogy has opened frontiers and given inspiration to material chemists and biotechnologists in the synthesis of new materials for clean energy generation, environmental remediation and energy-efficiency technologies. Redox-active minerals are among the most attractive materials in many industries, including waste minimisation and recycling, reduction of atmospheric pollution, carbon sequestration and novel energy storage using materials such as electronic ceramics. Redox-active minerals are also abundant in nature, occurring in environments such as aquatic sediments, hydromorphic soils, sewage sludge, waterlogged peat soils, hypolimnia of stratified lakes, sediments of eutrophic rivers and seafloor hydrothermal vents, to name just a few. Their abundance in nature has driven research to understand how biological processes mediate redox active mineral formation. A molecular-level understanding of the electron-transfer reactions is the key to innovate many society-formative and clean technologies, including ore processing, waste recycling and the environment protection that are based on stringent control of interfacial processes.[1]

Four of the Special Interest Groups of the Mineralogical Society will come together for a summer 2017 meeting with the theme 'Redox-Active Minerals in Natural Systems'. The meeting will consist of two days of scientific sessions (including a poster session) followed by a one-day field trip to Parys Mountain, NE Anglesey, north Wales.

Each of the SIGs will sponsor a session at the meeting, with delegates encouraged to move between sessions. There will be a minimum of five keynote speakers:

- **Geomicrobiology Network**: Amelia-Elena Rotaru (University of southern Denmark)
  Clay Minerals Group (contact Anke Neumann: Anke.Neumann@newcastle.ac.uk)
- **Geochemistry Group** (contact Jason Harvey feejh@leeds.ac.uk): Susan Little (Imperial College, London)
- **Environmental Mineralogy Group** (contact Claire Corkhill: c.corkhill@sheffield.ac.uk): speaker tbd
- Mineralogical Society **Hallimond Lecturer**: Barrie Johnson, Bangor University (Wales).

Check the society's website for details (http://www.minersoc.org/Redox.html).

2017 JOURNAL CONTENTS

Check new content in both *Mineralogical Magazine* (www.minersoc.org, members click on login; http://www.ingentaconnect.com/content/minsoc/mm and http://minmag.geoscienceworld.org/) and *Clay Minerals* (www.minersoc.org, members click on login; http://www.ingentaconnect.com/content/minsoc/cm and http://claymin.geoscienceworld.org/)

1 Introductory text courtesy of K. Hudson-Edwards and I. Ahmed, editors of an EMU Notes in Mineralogy Volume: *Redox-Active Minerals: Properties, Reactions and Applications in Natural Systems and Clean Technologies*, to be published in 2017)

ROY STARKEY RECEIVES THE PRESTIGIOUS MARSH AWARD

Roy E. Starkey has received the 2016 Marsh Award for Mineralogy. The Marsh Awards recognise 'unsung heroes or heroines' who have made a major contribution to the promotion of mineralogy in the UK or abroad. Roy was presented the award by Brian Marsh OBE (chairman of the Marsh Christian Trust) at a ceremony held at the Natural History Museum (London, UK) on 6 February 2017

Roy is an amateur mineralogist and member of the MSGBI and has passionately dedicated his life to British topographic mineralogy. He was instrumental in the formation of the British Micromount Society in 1981.

Over the years, Roy has donated many personally collected specimens of British minerals to nearly every major museum in Britain, including the Natural History Museum (London), the Royal Scottish Museum and the Oxford University Museum of Natural History.

Roy's first book, *Crystal Mountains: Minerals of the Cairngorms*, was published in 2014 and is a culmination of over 25 years of fieldwork and research in a historically important mineral-producing region. He is currently engaged in research for his second book, *The Minerals of the English Midlands*, which is due for publication in 2018.

Roy is a former president of the Russell Society, has been a key player in the revitalization of the new mineralogical exhibit at the Lapworth Museum in Birmingham (UK) and, of course, co-organized the series of meetings 'Nature's Treasures' with the Mineralogical Society. Our warmest congratulations to Roy.

TRANS-IAPETUS WORKSHOP

This is a conference focused on the formation and destruction of the Iapetus Ocean. The meeting broadly follows from the Highland Workshop series and contributions are welcome from studies using geochronology, geochemistry, palaeontology, palaeomagnetism to geodynamic modelling.

The meeting will be hosted at the University of Hull, UK on 25-26 May 2017. More information from the workshop website at: https://transiapetus.wordpress.com/

GOLDSCHMIDT

Reminder that Mineralogical Society members are entitled to the members' rate when registering for the Goldschmidt Conference.