

Mineralogical Society of Great Britain and Ireland

www.minersoc.org

NEWS FROM LONDON

In the April 2020 issue of *Elements*, we asked from members, and others, for help in terms of outreach. This was with a view to helping those not directly involved in our science to understand a little of what it is that we do. There is now an even wider need that makes the request from the previous issue more relevant than ever: "And, in the spirit of 'ask not what your society can do for you....', what skills and talents could you bring to the society?" We would especially appreciate input in terms of technical offerings, e.g., podcasts, webinars, video editing, etc. *What can you do for your society*?

Please contact Kevin Murphy (kevin@minersoc.org) if you have something to share.

MEETING – NEW TOPICS IN MINERAL SCIENCES 1. DIFFUSION IN MINERALS, ROCKS AND MELTS: POTENTIAL AND PITFALLS

Date: 23 October 2020 **Location:** Burlington House, London (UK)

The meeting will appeal to those interested in applying diffusion modelling across a wide range of mineralogical contexts to problems of rates, timing, and thermal history.

The meeting will be led by invited speakers who will address the fundamentals of diffusion theory, apply that theory to modelling of geological processes, and provide examples of state-of-theart research on diffusion in different geological contexts. The invited speakers and their general topics are as follows:

- Sumit Chakraborty Diffusion Theory
- I. Diffusion in minerals, rocks and melts:
 potential and pitfalls
 www.minersoc.org/diffusion.html
 Burlington House, London
 23 Oct 2020

IMAGE COURTESY OF VICTORIA MARTIN

- Dan Morgan Modelling and Theory
- John MacLennan Timescales of Magmatic Processes
- Thomas Müller Diffusion and Thermobarometry in Metamorphism
- Tina Marquardt Grain Boundary Diffusion
- Clare Warren Diffusion and Thermochronometry

These will be followed by a poster session, primarily for student poster presentations, with 90 second 'nano-introductions' to each. The proceedings will conclude with a panel discussion.

Short Course

The MinSoc will hold a one-day short course on diffusion modelling on October 22 at the Natural History Museum, London (UK). Details will be made available shortly.

Note: We currently plan to run this as an in-person meeting. If this changes we will provide appropriate information on our website (https://www.minersoc.org/diffusion.html).

MINERALOGICAL MAGAZINE

Papers from the 3rd International Critical Metals Meeting, Edinburgh (UK) in May 2019

MINERALOGICAL

MAGAZINE

"Critical Metal Mineralogy and Ore Genesis Revisited: Thematic Set Arising from the Third International Critical Metals Meeting, Edinburgh"

Eimear Deady, Sam Broom-Fendley

"Challenges to the European Automotive Industry in Securing Critical Raw Materials for Electric Mobility: The Case of Rare Earths" Marc Schmid

"Structural State of Rare Earth Elements in Eudialyte-Group Minerals"

Anouk M. Borst, Adrian A. Finch,

Henrik Friis, Nicola J. Horsburgh, Platon N. Gamaletsos, Joerg Goettlicher, Ralph Steininger, Kalotina Geraki

"Sulfur-bearing Monazite-(Ce) from the Eureka Carbonatite, Namibia: Oxidation State, Substitution Mechanism, and Formation Conditions"

Sam Broom-Fendley, Martin P. Smith, Marcelo B. Andrade, Santanu Ray, David A. Banks, Edward Loye, Daniel Atencio, Jonathan R. Pickles, Frances Wall

"Light Rare Earth Element Redistribution during Hydrothermal Alteration at the Okorusu Carbonatite Complex, Namibia" Delia Cangelosi, Sam Broom-Fendley, David Banks, Daniel Morgan, Bruce Yardley

"The Role of Sulfate-Rich Fluids in Heavy Rare Earth Enrichment at the Dashigou Carbonatite Deposit, Huanglongpu, China"
Delia Cangelosi, Martin Smith, David Banks, Bruce Yardley

"Mineralogy and Genesis of Pyrochlore Apatite from the Good Hope Carbonatite, Ontario: A Potential Niobium Deposit" Roger H. Mitchell, Rudy Wahl, Anthony Cohen

"Strain Partitioning in Host Rock Controls Light Rare Earth Element Release from Allanite-(Ce) in Subduction Zones" Luca Corti, Davide Zanoni, G. Diego Gatta, Michele Zucali

METAMORPHIC STUDIES GROUP

In case you missed the Metamorphic Studies Group Virtual meeting, video recordings of the oral presentations are now available from https://www.minersoc.org/msg-rip-virtual-2020.html

Videos include the talk:

Not all kyanite is created equal – The petrogenesis of kyanite migmatites in Eastern Bhutan

S.E. Phillips, T.W. Argles, N.B.W. Harris, C.J. Warren, N.M.W. Roberts and B. Kunz which won best student oral presentation award for Stacy Philips.

The best student poster presentation went to Allie Nagurney for: Microstructural Controls on the Crystallization of Garnet: An Example from the Meguma Terrane, Nova Scotia Allie Nagurney and Mark Caddick