MSA: Dedicated to Diversity, Equity, and Inclusion

The geosciences are among the least diverse of the sciences, and the mineralogy and petrology community is no exception. Yet a diverse workforce is important in addressing many of the grand challenges facing humanity. Locating natural resources, understanding geohazards, remediating environmental degradation, and addressing climate change are just some of the problems that require mineralogy and petrology expertise. The best solutions to these problems will come from a creative mineralogy/petrology community with a full range of interests, experiences, backgrounds, and perspectives.

Professional societies such as the MSA have a special role to play in fostering a diverse community. They set the expectations for their members. For example, MSA’s mission statement says, “MSA depends on the involvement of all individuals who are concerned with the health and direction of the field of mineralogy. MSA supports and champions efforts by individuals and organizations to foster a climate of inclusion, diversity, and acceptance in the sciences and in the wider public.”

It is incumbent on the MSA to ensure these are not empty words. We have an obligation to build an inclusive community of our members, no matter what their career stage, color, gender, and orientation. We must examine our organization, determine what is needed, and take tangible actions to promote and exemplify a professional society that welcomes a diverse membership, promotes responsible practice of mineralogy and petrology, and serves all of humanity with our science.

To that end, I have convened a task force to recommend actions that MSA should take to be more inclusive as a society and to increase the diversity in our discipline. I am truly grateful to the MSA members who responded to the invitation on MSA-Talk and our social media channels and who volunteered to serve on this task force. The members are Tyler Spano and Mark Ghiorsio (co-chairs), Don Baker, Ken Brown, Astrid Holzheid, Liz Johnson, Brian Lejeune, Cam Macris, Brittani McNamee, and Zeb Page. They are already at work, sharing experiences and expertise and brainstorming ideas. The task force is considering a variety of possible actions, including recommending best practices for selecting fellows and medalists, a more proactive process for nominating committee members and officers, how to diversify our lecture series. They are developing ideas for possible new activities, such as member mentoring, networking, professional development opportunities, and public outreach programs. This group will submit a report to the MSA Council’s meeting in late October. I anticipate that they will identify some actions that can be adopted immediately and others that will require a longer time frame. And I expect their ideas will be met with enthusiasm by the MSA Council.

The ShutDownSTEM movement [organized in part by the American Association for the Advancement of Science] declares, “It is not enough to say that you stand in solidarity. We need you to be accountable. We need your actions.” The MSA commits to making a difference and being part of the solution.

Carol Frost
2020 MSA President
Earlier this year, a number of subscribers to MSA-Talk contributed resources and suggestions for teaching mineralogy and petrology courses online. These suggestions have been (and are being) collected and organized and are available on the MSA’s website: see http://www.minsocam.org/msa/Teaching_Resources.html and http://www.minsocam.org/msa/Teaching_Suggestions.html.

The resources include videos, animations, images, models, textbooks, databases, thin section scans, quizzes, Mineralogy4Kids, and much more. The MSA extends its deep thanks to all of those in the community who contributed (and continue to contribute) to these helpful resources and teaching ideas.

ANNUAL MEETING

The Annual Meeting of MSA members will be held virtually via Zoom at 3:00 PM Eastern Time on Saturday, 24 October 2020. The meeting will include presentations by MSA President Carol Frost, Secretary Kimberly Tait, and Treasurer Thomas Duffy. Details for how to register will be sent to all MSA members prior to the meeting.

DID YOU KNOW?

The MSA has a variety of open access publications on its website available at www.minsocam.org/msa/openaccess_publications/. These include the Guide to Thin Section Microscopy; Teaching Mineralogy; Reviews in Mineralogy and Geochemistry Volumes 75 (Carbon in Earth) and 80 (Pore-Scale Geochemical Processes); American Mineralogist from 1916–1999; the Handbook of Mineralogy; and a number of other monographs and special papers.

Japan Association of Mineralogical Sciences Award to Takuo Okuchi

Takuo Okuchi is an associate professor at the Institute for Planetary Materials, Okayama University (Japan). By the time news of his award has been published he will have been promoted to professor at the Institute for Integrated Radiation and Nuclear Science, Kyoto University (Japan). Prof. Okuchi revealed how hydrogen was incorporated into the molten metallic core of the Earth: essentially, due to an iron–water reaction that occurred during the accretion phase of the early solar system. This was his PhD research at Tokyo Institute of Technology, and, since then, he had been continuously aiming and working to understand hydrogen’s behavior inside Earth and other planets. He has developed several novel experimental methods for solving these topics. For example, at Nagoya University (Japan) and Geophysical Laboratory (USA) he developed an ultrahigh-pressure high-resolution nuclear magnetic resonance (NMR) spectroscopy method using diamond anvil cells; another example is how, at Okayama University together with his PhD student Pureyjav Narangoo, he structurally analysed deep-Earth hydrous minerals using time-of-flight Laue single crystal neutron diffraction. With other high-pressure mineralogists, he also contributed to the development of experimental techniques for in situ high-pressure neutron powder diffraction measurements at the Japan Proton Accelerator Research Complex (J-PARC).

In addition, he has been working on laser-driven shock compression experiments of planetary materials, including dense water, minerals, and extremely compressed magmas. He has played a central role in developing a community of researchers in this field within the region of Japan and east Asia. Laser shock is a very effective way to study planetary shock processes and for analyzing extreme states of matter. Thus, developing a community around this technique and forging links with those who study the mineralogy of meteorites is an important goal for Prof. Okuchi: it helps activate research into planetary materials and advances our understanding of solar system evolution. To this day, Prof. Okuchi continues his cutting-edge research into Earth and planetary minerals.

Japan Association of Mineralogical Sciences Award to Kazuki Komatsu

Kazuki Komatsu is an associate professor at the Geochemical Research Center, Graduate School of Science, University of Tokyo (Japan). He started studying the high-temperature and high-pressure behavior of hydrous minerals (e.g., muscovite, topaz-OH, δ-AIOOH) at the mineralogy group in Tohoku