

Mineralogical Society of America



www.minsocam.org

PRESIDENT'S LETTER

Greetings from the 100th President of the Mineralogical Society of America in the Mineralogical Society of America's 100th year! It is indeed an honor to be president during this time: a time in which we will celebrate our successful past and plan for a successful future. I also feel fortunate to be "sandwiched" between Mike Brown, the outgoing president, and Carol Frost the incoming vice-president. Mike has been amazing to work with and has helped the society in so many ways with his many ideas and tireless efforts. I want to officially thank him for that.



The above photo shows (FROM LEFT TO RIGHT) Mineralogical Society of America (MSA) presidents #100 (Mickey Gunter), #62 (Jerry Gibbs), #58 (Don Bloss), and #68 (Paul Ribbe). I was blessed to have had them as my mentors. Looking back, each of them also had at least one past MSA President as their graduate advisor. In what would seem like a strange diversion at this point, a story seems fitting. At the 2002 International Mineralogical Association meeting, MSA President #83 (Rod Ewing) started to introduce me to MSA charter Executive Director, Alex Speer. I mentioned to Rod, who I'd met in 1981, that I had met Alex two years earlier. Rod replied, "Our world is small ... perhaps too small." Of course, this was intended as a joke, but could be taken negatively. However, this statement has stuck with me for years, and I have concluded it is the mentoring, learning, friendships, and all the other positive things in life that results from this "small world" that are the essentials: we are a world-wide network of mineralogists who have very close ties. A corollary to this is the motto used by Google Scholar, "Stand on the shoulders of giants." Space does not allow me to mention all the MSA medals, awards, and editorships won by the presidential group plus their past-president advisors. I truly believe this is a reason our society has lasted 100 years. If we, the members, continue the efforts put forth by those who have come before us, our society can look forward to a superb centennial celebration in 2019.

During my tenure as MSA President, I will get to write six letters in *Elements*. As you see, this one looks to our past, while the last will look to our future. Along with updating you on MSA news, it seems logical that three of the letters should cover what most of us do in the academic world: teaching, research, and service (in the broadest sense) to mineralogy. And there will be one that will be more provocative and cause you to think a bit differently about the role of mineralogists in 2019 and beyond, especially outside of academia. I look forward to this opportunity to help pay back a society that has helped my career in more ways that I can count. Finally, it's a good thing I'm "retired!"

Mickey Gunter, 2019 MSA President

Notes from Chantilly

MSA Council decided on the 2019 award recipients at its Fall Council Meeting in Indianapolis (Indiana, USA). The Roebling Medal will be awarded to Peter R. Buseck (Arizona State University, USA); the Distinguished Public Service Medal to Rodney C. Ewing (Stanford University, California, USA); the Dana Medal to Matthew J. Kohn (Boise State University, Idaho, USA); the MSA Award to Olivier Namur (University of Hannover, Germany). Fellows newly elected for 2019 will be Carl Agee, Paul Asimow, Gray Bebout, Janice Bishop, Hongping He, Michael Jercinovic, Bradley Jolliff, Lindsay Keller, Penelope King, Daniel Neuville, Oliver Tschauner, Jun Tsuchiya.

All 2017 and 2018 MSA members have been contacted by mail, electronically, or both about renewing their membership for 2019. If you have not renewed your MSA membership, please do so. If you have not received a notice by the time you read this, please contact the MSA Business Office. You can also renew online anytime.

J. Alex Speer, MSA Executive Director jaspeer@minsocam.org

IN MEMORIAM

Allan Turnock (1959) George Desborough (1968) Kay U. Schuermann (1963) Ronald Januzzi (1979)

CALENDAR



The 2019 16-month calendar showcases gold. Photographs are by noted mineral photographer Jeff Scovil, as well as by Harold and Erica van Pelt and Michael Bainbridge. The text is by Robert B. Cook, and the calendar is published by Lithographie, LLC, in cooperation with MSA. It is available from MSA at http://www.minsocam.org/.

2018 MSA AWARDEES

At its annual meeting, the Mineralogical Society of America presented three awards:

Roebling Medal



E. Bruce Watson of Rensselaer Polytechnic Institute (Troy, New York) was presented with the 2018 Roebling Medal in recognition of his outstanding contributions in experimental petrology through which he has led pioneering developments across a large spectrum of problems in phase equilibrium studies in magmatic systems; mineral–melt element partitioning; trace element thermometry; and surface tension properties and

kinetic processes, especially the diffusion kinetics, in systems of geological interest. He has combined the techniques of experimental petrology and trace element geochemistry to solve problems involving element migration in the deep crust, mantle rocks, and, more recently, in surficial environments. An impressive aspect of Dr. Watson's research is in his choice of problems. They are almost always at the frontier of the field but, at the same time, have very broad appeals; very few people have Dr. Watson's vision of the long-term and wide-ranging impact of a chosen research problem.

Dana Medal



The 2018 Dana Medal is awarded to **Joerg Hermann** of the University of Bern (Switzerland). The award is in recognition of sustained outstanding scientific contributions through original research in the mineralogical sciences by an individual in the midst of his or her career. Dr. Hermann is cited for his selection of important scientific problems, excellent experimental methodology, thorough execution, peerless data analysis, and insightful speculation on future

research directions. He has made original and profound contributions to our understanding of the petrologic and geochemical consequences of subduction, to the influence of accessory minerals on the geochemistry of fluids and melts, and on the interpretation of accessory mineral geochronometers. Rare among modern petrologists, Dr. Hermann combines field, experimental, and analytical expertise, in all of which he has become acknowledged by the international community as expert.

MSA Award



The 2018 MSA Award goes to **Laura Nielsen Lammers** of the University of California, Berkeley (USA). Dr. Lammers was cited for her outstanding development and use of quantitative methods and models to identify and predict equilibrium and kinetic controls on mineral and geochemical processes. She has already achieved a significant breakthrough in developing a quantitative model to account for kinetic isotope and trace element effects during crystal growth from

aqueous solution, a process that is fundamental to a wide range of geochemical and mineralogical processes.

AWARD NOMINATIONS

Nominations Sought for 2020–2021 Awards

NOMINATIONS MUST BE RECEIVED BY 1 JUNE 2019

The **Roebling Medal** (2020) is MSA's highest award and is given for eminence as represented by outstanding published original research in mineralogy.

The **Dana Medal** (2020) is intended to recognize continued outstanding scientific contributions through original research in the mineralogical sciences by an individual in the midst of their career.

The **Mineralogical Society of America Award** (2020) is given for outstanding published contribution(s) prior to the 35th birthday or within 7 years of the PhD.

The **Distinguished Public Service Medal** (2021) is presented to an individual who has provided outstanding contributions to public policy and awareness about mineralogical topics through science.

Society **Fellowship** is the recognition of a member's significant scientific contributions. Nomination is undertaken by one member, with two members acting as cosponsors. A form is required. Please contact committee chair or MSA home page.

Mineralogical Society of America

Submission requirements and procedures are on MSA's home page: http://www.minsocam.org/

RESEARCH GRANTS

The Mineralogical Society of America 2019 Grants for

RESEARCH IN CRYSTALLOGRAPHY

from the Edward H. Kraus Crystallographic Research Fund with contributions from MSA membership and friends

STUDENT RESEARCH IN MINERALOGY AND PETROLOGY

from an endowment created by MSA members



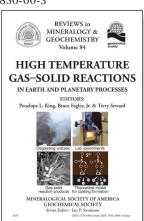
Selection is based on the qualifications of the applicant; the quality, innovativeness, and scientific significance of the research of a written proposal; and the likelihood of success of the project. There will be up to three US\$5,000 grants, with the restriction that the money be used in support of research.

Application instructions and online submission are available on the MSA website, http://www.minsocam.org. Completed applications must be submitted by 1 March 2019.

NEW PUBLICATION

Reviews in Mineralogy and Geochemistry Volume 84: High Temperature Gas-Solid Reactions in Earth and Planetary Processes 2018. Editors: Penelope L. King, Bruce Fegley, Jr. and Terry Seward. i-xiv + 514 pages. ISBN 978-0-946850-00-3

Gas mixtures play a crucial role in distributing elements between different parts of the Earth and of planet-forming systems over a range of settings and temperatures. Despite the fundamental role of gases in geochemical cycles and their prevalence both in the crust and in the early solar system, we are unaware of any reviews on this topic. This volume arose from an interest in promoting further research into the role of gases in geologic systems on Earth and beyond, with an aim of illuminating the gaps in our knowledge. The focus is on hightemperature interactions, because at low temperatures, the low density, very low dielectric constant gas mixtures only



rather loosely "physisorb" onto natural materials. In contrast, at higher temperatures, solids volatilize and condense, they lose/gain volatile components, and heterogeneous chemisorption reactions can occur between gases and solid surfaces. These reactions have previously been paid very little attention, but recent research has laid some foundations for understanding the processes involved and their applications to Earth and planetary environments.

The volume is divided into five main topics: (1) Experimental and analytical approaches to characterizing gas-solid reactions; (2) Modelling approaches to examining gas-solid reactions; (3) Terrestrial volcanic systems; (4) Planetary systems; (5) Industrial processes.

Description and ordering online at www.minsocam.org or contact Mineralogical Society of America, 3635 Concorde Pkwy Ste 500, Chantilly, VA 20151-1110 USA phone: +1 (703)652-9950 fax: +1 (703) 652-9951 e-mail: business@minsocam.org. Cost is \$45 (\$33.75 members MSA, GS, CMS).

ELEMENTS DECEMBER 2018