Japan Association of Mineralogical Sciences

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JAPAN ASSOCIATION OF MINERALOGICAL SCIENCES AWARDEES

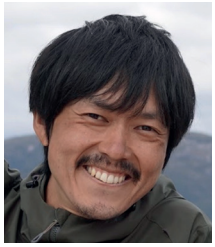
The Japan Association of Mineralogical Sciences (JAMS) is proud to announce the recipients of its 2021 society awards. The JAMS Award for Young Scientists is presented to two scientists who are under 37 years of age and have made exceptional contributions to mineralogical and related sciences. The JAMS Award for Applied Mineralogy is awarded to one scientist who has made a remarkable contribution to the field of applied mineralogy. The JAMS Research Paper Award is awarded to the authors of one or more excellent papers that were published in the *Journal of Mineralogical and Petrological Sciences* (JMPS) and/or *Ganseki-Kobutsu-Kagaku* (GKK) in the past three years.

JAMS Award for Young Scientists to Yui Kouketsu

Yui Kouketsu is a lecturer at the Graduate School of Environmental Studies, Nagoya University (Aichi, Japan). She applies Raman and infrared spectroscopy to minerals to extract properties of various types of rocks and applies these methods to petrology and geology. One of the most notable achievements in the field of Raman spectroscopy is the successful introduction of a pressure scale to quartz Raman barometry, which had been conventionally used for qualitative pressure constraints. This research is the forerunner of Raman geobarometry research, which is still being refined by many researchers. Yui's group also proposed a Raman geothermometer applicable to low-grade metamorphic rocks below 400 °C, using the FWHM of the Raman peak of the carbonaceous material as a parameter. The proposed method can be used to estimate temperatures over a wide metamorphic range in combination with existing geological thermometers that can be applied at temperatures above ~340 °C. She applied these geothermometers to the Sanbagawa metamorphic belt in central Shikoku (SW Japan) and combined the results with detailed descriptions of the minerals included in the garnet porphyroblast to verify the metamorphic history of this area. As a result, the boundary between eclogite/non-eclogite units was determined and a wider area than previously assumed was recrystallized under eclogite facies conditions. In addition, a more precise regional thermal structure was revealed when using the Raman carbonaceous material geothermometer. These results are extremely important for understanding the formation and exhumation processes of subduction-type metamorphic zones.

In the field of infrared spectroscopy, her group has succeeded in applying attenuated total reflection infrared (ATR-IR) spectroscopy to serpentine group minerals, which are thought to play an important role in various phenomena occurring in subduction zones, and has discussed the relationship between chemical composition and O–H vibration bands. This achievement has made it possible to obtain infrared spectroscopic data with much simpler preprocessing than before, and has opened up new avenues for the use of this spectroscopic method in the field of petrology.

JAMS Award for Young Scientists to Norikatsu Akizawa



Norikatsu Akizawa is an assistant professor in the Atmosphere and Ocean Research Institute (AORI), The University of Tokyo (Japan). He obtained his PhD from Kanazawa University (Japan) under the supervision of Professor Shoji Arai. Norikatsu is interested in the evolutional process of oceanic lithosphere after formation at spreading axes. His target samples are mantle peridotites and gabbroic rocks from ophiolites, oceanic islands, and ocean floors. Magma genesis in mid-ocean ridges is the first scientific theme he was interested in. He applied a steady-state mantle melting–reaction model to quantitatively evaluate magma genesis along the ridge axis. Deep-seated hydrothermal alteration around the gabbro/peridotite boundary is one of his particular interests. To decipher the functional mechanism and elemental transport during hydrothermal fluid–rock interactions, he employed chemical and isotopic analyses with intensive investigations of silicate-hosted fluid inclusions. In recent times, Norikatsu has started to investigate mantle heterogeneity in terms of highly siderophile element (HSE) and Re–Os isotope compositions. He uses intensive sub-micrometer-scale investigation methods to reveal the detailed distribution of HSEs in the mantle. In addition, he has a keen interest in detecting mantle domains recording ancient melting events irrelevant to the melting beneath the spreading axis. The mantle xenoliths from oceanic islands and petit-spot volcanoes (remarkably small knolls: ~1 km^3 in observable surface volume) are the present main targets that he is working on. Norikatsu is also enthralled by the dynamic evolution and complex nature of the oceanic lithosphere.

JAMS Award for Applied Mineralogy to Ahmadjan Abduriyim

Ahmadjan Abduriyim (Ahimadei AI) is the president of the Tokyo Gem science company and the director of the GSTV Gemological laboratory in Tokyo. He received his PhD in mineralogy and geology from Kyoto University. He then joined the Gemological Association of All Japan and the GIA Tokyo laboratory as a senior scientist and manager of color stone identification services. His professional interest is research on geographic origin determinations of major gemstones, gem testing of color stones, and the LA-ICP-MS technique in the gemological field. Dr. Ahmadjan has published numerous articles on various topics related to diamonds, colored stones, and organic gem materials, and his articles have received several awards from the *Gems & Gemology* journal.

In gemstone identification, it is necessary to distinguish the geographic origin of natural stones, identify diversifying synthesis and treatment methods, and identify individuals. Dr. Ahmadjan has been working to solve this problem by advancing the following three categories of research and by integrating the information obtained from various series of research: (1) collection of geological data and gem samples through field surveys at gem mines around the world; (2) application of high-precision analytical methods such as chemical composition analysis and spectroscopy by advanced science and technology to gemstone; and (3) construction of an indispensable database for the latest geographic origin determination and individual identification. For the application of advanced science and technology that provides important information n these categories of research, he is conducting

advanced research including measuring trace elements via LA-ICP-MS and dating by U-Pb isotopes for geographic origin determination and to demonstrate their usefulness.

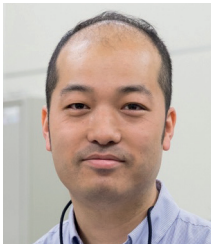
JAMS Research Paper Award to Keisuke Eshima

The JAMS Research Paper Award goes to author **Keisuke Eshima** for his paper "Anatomy of Shaku–dake high-Mg diorite, southwest Japan: Lithofacies variations and growth process of high-Mg diorite stock," which was published in the 2021 *JMPS* (vol. 116, pp 83–95), and to authors **Yuichiro Mori**, **Hiroyuki Kagi**, **Sho Kakizawa**, **Kazuki Komatsu**, and **Arisa Sano** for their paper "Neutron diffraction study of hydrogen site occupancy in $Fe_{0.95Si0.05}$ at 14.7 GPa and 800 K," which was published in the 2021 *JMPS* (vol. 116, pp 309–313).

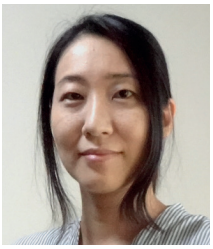
Yuichiro Mori

Hiroyuki Kagi

Sho Kakizawa



Kazuki Komatsu



Arisa Sanoa

International Association of GeoChemistry

www.iagc-society.org

LEADERSHIP ANNOUNCEMENT

Vice-President

Elisa Sacchi is the new incoming Vice President of the IAGC. She graduated in Earth sciences in 1990 and obtained her PhD in geochemistry in 1995. Since 2002, she has been at the University of Pavia, Italy, as a Researcher and, since 2015, as an Associate Professor. She is officially in charge of teaching geochemistry and environmental geochemistry for students of Earth, Natural, and Environmental Sciences. During her post-graduate studies, she developed her research activity in the field of environmental geochemistry, obtaining numerous fellowships and contracts (Government of Canada Award, University of Torino, Université de Paris XI, and Australian Nuclear Science and Technology Organisation). She also worked as a consultant for Italian and international institutions (INFN, ANDRA, OCDE Nuclear Energy Agency, and ANSTO) in the fields of radioactive waste disposal and radiochemical contamination monitoring. Occasionally, she collaborates as an expert or tutor with the International Atomic Energy Agency, in the framework of Technical Cooperation Projects. Her main interests are in water, sediment, and soil pollution, water–rock interactions, and environmental applications of isotope geochemistry. She has authored 65 papers in international peer-reviewed journals, two books, of which one was published by the OCDE, two book chapters, and more than 70 contributions to national and international conferences. Since 2011, she has been an Associate Editor for *Applied Geochemistry*, and since 2019, a Council Member of the International Association of GeoChemistry.

Applied Geochemistry Editor-in-Chief

Michael Kersten is stepping down after serving the last 10 years as Executive Editor of the society's official journal, *Applied Geochemistry*. The association owes a great debt of gratitude to Professor Kersten. He steered many successful special issues and brought the journal to its current IF of 3.8, maintaining its high quality and international reputation, while also maintaining a burgeoning research group at the Johannes Gutenberg-University of Mainz (Germany). Current co-Editor-in-Chief Zimeng Wang will serve as the sole Executive Editor of the journal.

WATER–ROCK INTERACTION WRI-17 AND APPLIED ISOTOPE GEOCHEMISTRY (AIG-14) IN SENDAI, JAPAN

After years of COVID-related delay, the 2nd IAGC International Conference (WRI-17 and AIG-14) will be held in Sendai, Japan, 18 August through 22 August 2023. Join us in Japan!

www.wri17.com

Registration:
June 2022–June 2023

Abstract Submission for Oral Presentation:
August 2022–31 January 2023

Abstract Submission for Poster Presentation:
August 2022–31 March 2023