



Japan Association of Mineralogical Sciences

http://jams.la.coocan.jp/e_index.html

The Japan Association of Mineralogical Sciences (JAMS) is proud to announce the recipients of its 2022 society awards. The Japan Association of Mineralogical Sciences Award is presented to a maximum of two scientists each year for exceptional contributions to mineralogical and related sciences. The Manjiro Watanabe Award—named in honor of Professor Manjiro Watanabe, a famous Japanese mineralogist, and founded at his bequest—is awarded every year to one scientist who has significantly contributed to mineralogical and related sciences over his or her career. The Sakurai Medal—named in honor of Dr. Kin-ichi Sakurai, the discoverer of many new minerals—is awarded to a scientist who has made a lasting contribution to the study of new minerals.

JAPAN ASSOCIATION OF MINERALOGICAL SCIENCES AWARD TO AKIRA YAMAGUCHI



Akira Yamaguchi is an associate professor and the curator of Antarctic meteorites at the National Institute of Polar Research, Japan. He received a Doctor of Science from the Graduate School of Science, University of Tokyo, Japan in 1994. As a post-doctoral fellow, Dr. Yamaguchi worked at the University of Hawaii at Manoa (USA) and the National Institute for Research in Inorganic Materials, Japan. His study mainly focuses on the

petrogenesis of differentiated meteorites such as HEDs. He studied the mineralogy of these meteorites combined with geochemical and chronological techniques. Dr. Yamaguchi also conducted shock recovery experiments to understand the phase transformation and deformation processes of planetary materials. These studies help to understand the thermal history and geochemical variations of basaltic eucrites and diogenites, which are closely related to the crustal evolution of asteroid Vesta. During his studies of differentiated meteorites, Dr. Yamaguchi was the first to discover a new type of basaltic achondrite derived from an asteroid other than Vesta. This finding allowed comparative studies of differentiated bodies in the early Solar System. Dr. Yamaguchi has also studied other types of meteorites, such as ordinary and carbonaceous chondrites, primitive achondrites, lunar and Martian meteorites, as well as samples returned from the asteroid Ryugu by the Hayabusa2 spacecraft. He is taking leadership of the curation of Antarctic meteorites and providing these samples to the planetary sciences community. Dr. Yamaguchi was elected as a fellow of the Meteoritical Society for these achievements.

JAPAN ASSOCIATION OF MINERALOGICAL SCIENCES AWARD TO TAKASHI YOSHINO



Takashi Yoshino is a professor at the Institute for Planetary Materials (IPM), Okayama University, Japan. In the early years of his career, he focused on fieldwork and researched metamorphic petrology. After obtaining his PhD, he began research on transport properties of core and mantle materials based on high-temperature and high-pressure experiments. Among his many achievements, his most notable contribution is

the study of the electrical conductivity of the mantle and core materials. For example, he detected interconnection of molten Fe-S in an olivine matrix by conductivity measurements and concluded that core formation began at a very early stage of planetesimal accretion. He also measured the electrical conductivity of hydrous olivine and showed that proton conduction was insufficient to interpret the high conductivity of the oceanic asthenosphere. He extended the conductivity measurements to hydrous wadsleyites and ringwoodites, and showed that despite their high water storage capacities, the water content in the

mantle transition zone may be not so high (< 0.1 wt%). Since then, he has expanded the objects of electrical conductivity measurement to hydrous minerals, fluids, volatile-bearing melts, and metals forming the Earth and planets. Currently, Prof. Yoshino is the director of IPM and an associate editor of the *Journal of Geophysical Research: Solid Earth*, and will continue to contribute to the development of our community.

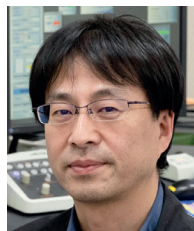
MANJIRO WATANABE AWARD TO MICHIAKI BUNNO



Michiaki Bunno was born in Tokyo in 1942. He graduated from Akita University, Faculty of Mines, Department of Mining and Geology with an MS in engineering from the University of Tokyo, and specialized in mineralogy and ore deposit studies during his PhD. He has worked as a research associate at the University of Tokyo's National Archives and Records Administration, and the director of the Geological Specimen Gallery at the

Geological Survey of Japan, formerly of the Agency of Industrial Science and Technology, Ministry of International Trade and Industry. During his tenure, he conducted mineralogical research on specimens, wrote catalogues and commentaries, and conducted exhibition and dissemination activities. He also wrote catalogues and explanatory books on mineral specimens and conducted exhibitions and dissemination activities. Dr. Bunno photographs mineral specimens from a specialist's viewpoint and has contributed to textbooks, illustrated books, and magazines. He was dispatched by JAICA to MTA in the Republic of Turkey as a resource development specialist for two years from 1987. He has directed and cooperated in the exhibition of the Beijing Geological Museum in China. He has promoted the archiving of unorganized mineral specimens from Akita University, Kyoto University, and the University of Tokyo, and has published a catalog of materials. He is also a member of the National Review Committee for New Minerals and Mineral Names.

SAKURAI MEDAL TO NAOTAKA TOMIOKA



Naotaka Tomioka is a senior research scientist at the Kochi Institute for Core Sample Research, Japan Agency for Marine-Earth Science and Technology. His PhD was supervised by Prof. Kiyoshi Fujino at Hokkaido University and awarded in 1999. His main research area is crystal structures and phase transformations of minerals. In his early scientific career, he employed transmission electron microscopy (TEM) to investigate

meteorites. Starting with the discovery of MgSiO_3 -perovskite and -ilmenite, Dr. Tomioka found a variety of high-pressure minerals in heavily shocked chondrites. Among these minerals, he named MgSiO_3 ilmenite and Mg_2SiO_4 epsilon spinelloid, the new minerals of akimotoite and poirierite, respectively. These discoveries greatly stimulated the field of high-pressure mineralogy. The growth of this field since then is evidenced by the fact that over 30 new high-pressure minerals have been found in terrestrial and extraterrestrial rocks in the last quarter century. Dr. Tomioka's research interests also extend to high-pressure experimental mineralogy. In addition to the occurrence of natural high-pressure minerals, his detailed microstructural and crystallographic analyses of experimental samples have better constrained the P - T histories of shock events that occurred in their parent asteroids. As a result of his valuable contributions to mineralogy, Dr. Tomioka was elected as a Fellow of the Mineralogical Society of America in 2022.