Sylvain Bernard

One of the recipients of the 2021 Research Excellence Medal of the European Mineralogical Union is Dr. Sylvain Bernard from the Institute of Mineralogy, Materials Physics, and Cosmochemistry (IMPMC-CNRS, France).

Dr. Bernard’s highly innovative and inspiring research at the frontiers of mineralogy, paleontology, biogeochemistry, and mineral physics has provided significant contributions to a number of fields including the weathering and aqueous alteration of minerals, mineral–mineral and mineral–microbe interactions in sedimentary environments, and the processes that influence the preservation of organic matter in carbonaceous meteorites. His cutting-edge studies constitute an important step towards better constraining hydrocarbon generation and retention processes that occur within unconventional gas shale systems. Additionally, he has developed original experimental and analytical approaches to capture the interactions of biomarker molecules and minerals at a near atomic scale. Despite his young age, he has already manifested himself as a major personality on the international scientific stage, as a geochemist of exceptional capabilities, very high productivity, and true creativity.

The esteem in which his peers, nationally and internationally, hold him is reflected in his roles as a member of the ESA-Roscosmos ExoMars mission team and a member of the international SuperCam team of the NASA Mars2020 Rover mission. The innovative and productive cutting-edge science should not hide another aspect of Bernard’s personality, namely his engagement for the promotion of science and for other outreach activities.

For his highly innovative and inspiring research at the frontiers of mineralogy and geochemistry and his international collaborative research, Sylvain Bernard is a highly deserving recipient of the 2021 EMU Research Excellence Medal.

Matteo Alvaro

The second recipient of the 2021 EMU Research Excellence Medal is Prof. Matteo Alvaro from the University of Pavia (Italy).

Prof. Alvaro is a mineralogist and crystallographer whose activities range across material science, mineral physics, and petrology. His research is, among others, dedicated to the understanding of the properties of minerals and materials at non-ambient conditions and the application of these property changes to understanding geological processes. His new assessment of elastic geobarometry aimed at constraining the “true depth” of the equilibration of rocks by combining mineralogy, mineral physics, and metamorphic petrology is particularly remarkable. He has renewed the old concept of geobarometry and brought it to a decidedly sounder level, hence opening up new and exciting applications.

His research is, and will continue to prove, truly transformative by providing fundamental contributions to our understanding of globally important geological processes using innovative ideas and approaches that are pushing crystallography and mineralogy to the leading role they deserve in Earth sciences. In addition to the successful implementation of exciting mineralogical research and the distribution of scientific results in the form of publications, he has also proved to be an enthusiastic and competent teacher. Prof. Alvaro is currently at the centre of a network of worldwide—but mostly European—connections and projects, offering training and acting as a mentor to a generation of young scientists.

The 2021 Research Excellence Medal of the European Mineralogical Union was awarded to Matteo Alvaro for his impressively significant contributions to research and teaching in mineralogy, and for his international collaborative research.

THE BARRINGER FAMILY FUND FOR METEORITE IMPACT RESEARCH

The Barringer Crater Company has established a special fund to support field work by eligible students interested in the study of impact cratering processes. The Barringer Family Fund for Meteorite Impact Research will provide a number of competitive grants in the range of $2,500 to $5,000 for support of field research at known or suspected impact sites worldwide. Grant funds may be used to assist with travel and subsistence costs, as well as laboratory and computer analysis of research samples and findings. Masters, doctoral, and post-doctoral students enrolled in formal university programs are eligible. Application to the fund will be due by 8 April 2022, with notification of grant awards by 10 June 2022.

Additional details about the fund and its application process can be found at: http://www.lpi.usra.edu/science/kring/Awards/Barringer_Fund