



Mineralogical Society of Poland

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It is my great pleasure and honor to present the Józef Morozewicz Medal, awarded by the Mineralogical Society of Poland for special merits in the development of mineralogical sciences. Józef Morozewicz (1865–1941) was an outstanding Polish petrographer and mineralogist, an organizer of scientific institutions, and an academic teacher whose legacy continues to inspire generations of Earth scientists.

In 2025, the Mineralogical Society of Poland honors Professor Janusz Janeczek in recognition of his outstanding scientific achievements, organizational activity, and long-standing service to the development of mineralogical sciences in Poland.

Professor Janusz Janeczek graduated in geology from the University of Wrocław in 1976 and obtained his doctoral degree there in 1983. Since 1984, he has been affiliated with the University of Silesia in Katowice, where he served in numerous academic and organizational roles, including two terms as Rector from 2002 to 2008. He was a Fulbright Fellow at the University of New Mexico (1989–1992), President of the Mineralogical Society of Poland from 1998 to 2004, Chair of the National Science Centre Council from 2016 to 2018, and Chair of the Mineralogical Sciences Committee of the Polish Academy of Sciences (most recently in the term of 2020–2023). Currently, he chairs the Advisory Board to the President of the Polish Atomic Agency. He is the author or co-author of more than 120 scientific publications.

Professor Janeczek's scientific interests are characterized by a remarkable ability to combine mineralogy with broader questions of geochemistry, environmental science, and nuclear physics. His research interests focus primarily on the mineralogy and geochemistry of uranium-bearing minerals, especially uraninite, studied as a natural analogue of spent nuclear fuel. In his research, he demonstrated that natural uraninite is a far better analogue of irradiated nuclear fuel than synthetic, non-irradiated UO₂. His work clarified the limits of uranium oxidation in uraninite, showing that higher uranium oxides postulated in the literature do not occur in nature. He also identified processes of uraninite transformation into coffinite as a possible pathway for the long-term alteration of spent nuclear fuel under reducing, silica-rich conditions. A major part of Professor Janeczek's research has also been devoted to the unique natural nuclear reactors of Oklo in Gabon. His studies revealed



The award ceremony in Kraków. Professor Janusz Janeczek (LEFT) with Professor Jarosław Majka, President of the Mineralogical Society of Poland (RIGHT).

that uraninites within reactor cores underwent episodic dissolution, leaching, and coffinitization under reducing conditions, leading to the release of nuclear reaction products, including rare earth elements. Using isotope analyses, he showed that the migration of these elements was effectively halted by the in situ crystallization of rare-earth-bearing phosphates and uranium minerals.

Beyond nuclear mineralogy, Professor Janeczek was a pioneer in the mineralogical study of atmospheric aerosols in Poland. He conducted the first detailed investigations of mineral dusts in Upper Silesia and the Dąbrowa Basin, demonstrating that combined mineralogical and meteorological observations allow the identification of specific industrial sources of particulate pollution. His research also showed that mineral particles deposited in human lungs may act as nucleation sites for calcite and magnesium-rich calcite, leading to extensive calcification of lung tissues. Importantly, he established and led a research team devoted to the mineralogy of atmospheric aerosols.

Another significant area of his work concerns the pegmatites of the Strzegom–Sobótka Massif. Professor Janeczek identified minerals atypical for granitic pegmatites, such as stilpnomelane and fayalite, as well as mineral assemblages characteristic of banded iron formations. He demonstrated that these pegmatites contain exclusively iron-rich chlorites and described several minerals previously unknown or very rare in Poland, including babingtonite, milarite, minnesotaite, and niobium–tantalum–tin-bearing titanite.

Professor Janeczek has also made a lasting contribution to the development of young scientific staff. He supervised nine doctoral dissertations and provided scientific mentorship to several other doctoral students. Through his guidance and example, he helped shape the research paths of at least five young mineralogists and petrologists at the University of Silesia.

On behalf of the Mineralogical Society of Poland, we extend our warmest congratulations and sincere thanks to Professor Janusz Janeczek for his exceptional scientific achievements, his dedication to academic life, and his profound contribution to the advancement of mineralogical sciences in Poland.

ABOUT THE TRIPLE POINT AUTHORS (cont'd from page 121)

Özgül Öztürk is a research scientist at the University of Siegen, Germany, specializing in plasma physics, light–matter interaction, and ultrafast dynamics. She works with XFELs and synchrotron methods (GISAXS, GID) and contributes to international scientific initiatives including SESAME, LAAAMP, and DAPHNE4NFDI.



Sekazi K. Mtingwa is a judge with the U.S. Nuclear Regulatory Commission and Principal Partner of TriSEED Consultants. He played an important role in the design and construction of accelerator systems at Fermilab used to discover the top quark. He also has co-founded over 30 organizations and programs, including LAAAMP.



Michele Zema is a professor of mineralogy at the University of Bari, Italy, and Fellow of the African Academy of Sciences. He co-founded and chairs LAAAMP, serves on IMA and African Light Source executive committees, and studies intracrystalline processes in minerals and solid solutions.



REFERENCES

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