Mineralogical Society of Poland

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JÓZEF MOROZEWICZ MEDAL AWARDED TO PROFESSOR PIOTR WYSZOMIRSKI

The Józef Morozewicz Medal is awarded by the Mineralogical Society of Poland for special merits in the development of mineralogical sciences. In 2024, the Mineralogical Society of Poland honored Professor Piotr Wyszomirski of the AGH University of Krakow and the State Higher Vocational School in Tarnów with the medal in recognition of his scientific achievements and efforts for the development of mineralogical sciences in Poland.

Professor Piotr Wyszomirski, DSc, Eng., is one of Poland's leading experts in mineralogical sciences. Over the course of a distinguished career, he has made significant contributions across academia, industry collaboration, teaching, and scientific societies. His work stands out for its focus on the practical uses of mineral resources—turning scientific discovery into real-world applications.

Professor Wyszomirski's early research centered on Polish basalts and their potential use in the metallurgical industry. This led to his acclaimed doctoral dissertation, "Polish Basalts as a Raw Material for the Production of Stone Casting," which laid the foundation for numerous scientific and technical publications both in Poland and internationally.

As a fellow of the prestigious Alexander von Humboldt Foundation, he expanded his research to the University of Heidelberg, Germany, where he conducted pioneering studies on the synthesis of sulfides in the Fe-Co-S phase system. His development of phase equilibrium diagrams during this time was a key advancement, with findings published in leading scientific journals.

Building on his foundational work, Professor Wyszomirski later turned his scientific focus to the geochemical characterization of clay raw materials—particularly kaolines—and their technological applications in ceramics. This research formed the core of his postdoctoral (habilitation) dissertation and has been shared widely at national and international conferences, as well as through numerous publications.

His interests evolved to encompass a broad spectrum of raw materials used in fine and structural ceramics, including those for expanded clay production, smectite-rich clays, feldspar deposits, and even rocks used in mineral water extraction. His curiosity and commitment to practical solutions led him to explore the reuse of industrial by-products, such as fly ash, evaluating their radioactivity and environmental safety through trace element leachability studies.

Another critical area of his research involved studying microstructural changes in dolomites during decarbonization—an issue central to the refractory materials industry. His interdisciplinary approach also extended to archaeology, where he collaborated with researchers to analyze mineral phases in Neolithic ceramic artifacts, helping trace the origin of ancient raw materials.

Throughout his career, Professor Wyszomirski has maintained strong ties with industry, particularly the ceramics sector, where his applied research has had lasting impact. He has led or served as principal investigator on more than 50 commissioned projects aimed at addressing real-world challenges in mineral resource utilization. These include optimizing crystallization processes in basalt, assessing imported bauxites for alumina cement, and evaluating Polish iron-rich clays for modern ceramic tile production.

Beyond his research, Professor Wyszomirski has made lasting contributions to education and academic development. He has designed and delivered over 20 academic courses—ranging from lectures and lab work to field training—at AGH University of Science and Technology and the State Higher Vocational School in Tarnów. His dedication to teaching is reflected in the influential textbooks he co-authored, including Ceramic Raw Materials, Methodology of Clay Mineral Studies, Mineral and Chemical Raw Materials of the Ceramic Industry, and his contributions to the comprehensive four-volume Encyclopedia of Mineral Resources.

Professor Wyszomirski has also played a key role in advancing the mineralogical community through his organizational leadership. He has served as secretary, vice-president, and president of the Polish Mineralogical Society, and has been an active member of several expert committees of the Polish Academy of Sciences, including the Committee of Mineralogical Sciences and the Committee on Mineral Resource Management. At AGH, he chaired the Scientific Commission of the School of Environmental Engineering, helping to shape academic strategy and research direction.

In recognition of his outstanding achievements across research, education, and professional service, Professor Piotr Wyszomirski stands as a leading figure in the field of mineralogical sciences—one whose work continues to leave a meaningful mark on both academia and industry.

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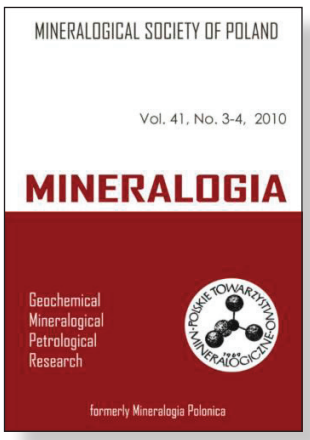

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MinPlotX is an open-source software designed for mineral formula recalculation and compositional plotting. It offers both an intuitive, stand-alone graphical user interface (GUI) and an advanced programming interface (API). The tool aims to generate publication-ready tables of mineral formulae and high-quality plots of mineral compositions—making it a valuable resource for researchers in the field.