

Włodzimerz Trzebiatowski (Obituary)

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The prominent Polish scientist and organizer of science Academician W. Trzebiatowski lost his life in an automobile accident on November 13, 1982.

The name of Academician Włodzimerz Trzebiatowski is widely known in scientific circles. His work in the field of physical chemistry of the solid state and structural investigations is universally acclaimed. He was the founder of the Wrocław scientific school of physical chemistry of solids.

As a scientist W. Trzebiatowski was distinguished by the versatility of his knowledge, and by the ability to concentrate his effort along the most promising scientific directions. As an organizer he had the ability to unify teams in solving problems posed to them. Trzebiatowski participated actively in social-political life of the Polish People's Republic, was elected a member of the Central Committee of the Polish United Workers Party and has accomplished much for the development of Soviet-Polish scientific collaboration.

W. Trzebiatowski was born on February 25, 1906 in Grodzisk Wielkopolski. He received his secondary education in Wrocław and Poznań. In 1924 he entered Lwów Polytechnical Institute. The main line of his scientific activity—the study of crystal structure, electron structure and physical properties of inorganic compounds—was already defined in the first papers published soon after his graduation from the Lwów Polytechnical Institute, and in the doctoral dissertation defended by him in 1930. His subsequent scientific activity is closely associated with this direction.

W. Trzebiatowski was the first in Poland to begin research on structural radiography. He specialized in the field of structural investigations of inorganic compounds in the Department of Physical Chemistry of the Lwów Polytechnical Institute and in different European scientific centers during scientific missions abroad. Recognition of his successes in this field was his election as Professor and Head of Department of Inorganic Chemistry of Lwów University where he continued to work until World War II.

The scientific activity of W. Trzebiatowski in the Polish People's Republic is closely associated with the city of Wrocław. Here he at first directed the Department of Inorganic Chemistry and then the mathematics-physics-chemistry faculties of the University and of the Polytechnical Institute. In 1963 he organized the Institute of Inorganic Chemistry and Metallurgy of Rare Elements which he directed until 1968. In 1967 he created in Wrocław the Institute for Low Temperatures and Structural Investigations of the Polish Academy of Sciences; until 1974 he was the Director of this Institute.



WŁODZIMERZ TRZEBIATOWSKI
(1906–1982)

During this period a number of investigations on the physical chemistry of solids was carried out by him personally and under his direction. Among them we should note the investigations of magnetic properties of actinides and of inorganic compounds based on them, particularly at low temperatures, of crystal structure and of physical properties of multicomponent phases with a wide region of existence. He was the first to discover ferromagnetism of uranium hydride. In the field of research on actinides Trzebiatowski was ahead of a number of major laboratories in the West. In addition kinetic properties of such compounds were investigated and for some of them the metal-semiconductor transition was observed. Trzebiatowski carried out investigations of the mechanism of formation and properties of systems obtained by subjecting metal powders to high pressures. The generalization by Trzebiatowski of the results of this research formed the basis for the development of powder metallurgy in the Polish People's Republic.

Trzebiatowski created in Wroclaw a scientific school of physical chemistry of solids. Among his students there are many candidates and doctors of science, some of whom have been elected members of the Polish Academy of Sciences.

Trzebiatowski devoted much effort to organizational activity in the Polish Academy of Sciences, a full member of which he was elected in 1956. He organized the Division of Physical Chemistry of Solids in the Polish Academy of Sciences. In 1963 he was elected as a member of the Presidium of the Polish Academy of Sciences. Between 1968 and 1972 he was Vice President and from 1972 until 1977 he was the President of the Polish Academy of Sciences.

W. Trzebiatowski is one of the initiators of the creation of the International Laboratory of Intense Magnetic Fields and Low Temperatures in Wroclaw and was its permanent director. Under his direction and during a short period of time there were developed and constructed systems for producing constant magnetic fields which in magnetic field intensity were not inferior to similar systems of the major world scientific centers. Utilization of these systems made it possible to carry out experiments to study the regularities in the variation of the critical parameters of high temperature superconductors, the magnetic properties of a number of magnetic materials in intense magnetic fields, the special features of the behavior of the kinetic properties of transition metals in constant magnetic fields of high intensity, etc. At present the International Laboratory in Wroclaw is a leading scientific center in the field of research in intense magnetic fields in the countries belonging to the Council of Mutual Economic Aid.

The accomplishments of W. Trzebiatowski as a scientist have been universally recognized not only in the Polish

People's Republic, but also beyond its frontiers. He has been elected foreign member of the Academies of Science of the USSR, Bulgaria, Czechoslovakia, German Democratic Republic, Cuba, and Mongolia. For a number of years he was the President of the Polish Chemical Society, the Chairman of the Wroclaw Branch of the Polish Academy of Sciences, the Honorary Chairman of the Committee on Chemical Sciences of the Polish Academy of Sciences, a member of the Presidium of the Committee on the Peaceful Uses of Nuclear Energy in the Polish People's Republic, a member of a number of other Polish and foreign scientific societies. For his scientific accomplishments the Polish Chemical Society awarded to W. Trzebiatowski the I. Sniadecki Medal, and the Polish Physical Society awarded to him the M. Smoluchowski Medal.

The government of the Polish People's Republic highly esteemed the activity of W. Trzebiatowski and awarded to him many Orders of the Polish People's Republic, among which is the highest Order of the Polish People's Republic "Builder of People's Poland". Trzebiatowski has been awarded State Prizes. In 1979 he was the recipient of a special State Award for organization and development of Polish science.

For the development of Soviet-Polish collaboration W. Trzebiatowski was awarded by the Supreme Soviet of the USSR the Order of the Friendship of Peoples.

The whole activity of W. Trzebiatowski right up to the last hours of his life was entirely devoted to selfless service to science. The name of Academician Trzebiatowski will forever live in our memory.

Translated by G. M. Volkoff