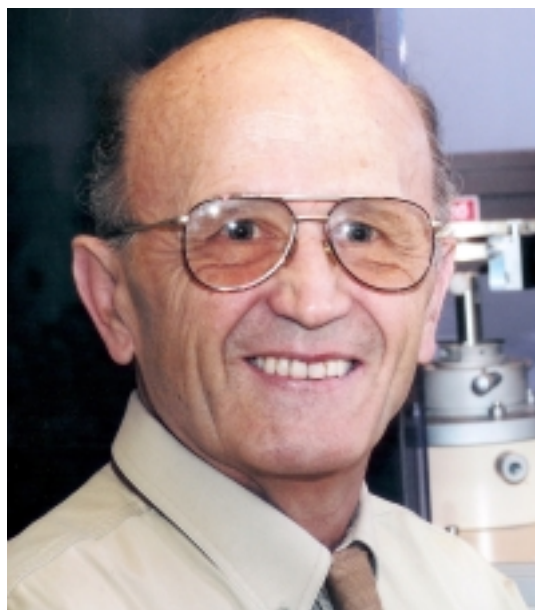


## REMINISCENCE OF PROFESSOR ZDENĚK WEISS

Professor Zdeněk Weiss, DrSc. cooperated mostly with the Academy of Science of the Czech Republic. Prof. RNDr. Zdeněk Weiss, DrSc passed away unexpectedly on 3 May 2005 in the middle of projects in progress, which he successfully initiated, but did not manage to complete. His work is remarkable. His most significant achievements include the foundation and establishment of the research institute VUCHEM (University Institute of Material Chemistry) at the Technical University of Ostrava with state-of-the-art technical appliances and professional background. Also the scope of the scientific areas studied under his supervision is remarkable, from fundamental research in crystallography and mineralogy to material research with applications in ecology and many industries. The significance of his scientific work goes far beyond the limits of one discipline. Nanomaterials that he was developing on the basis of modified clay minerals were intended for use in ecology as sorbents as well as construction materials on the basis of nanocomposite polymer-silicate as well as for optoelectronic applications as a tunable laser colorant.

Zdeněk Weiss was born on 9 January 1942 in Uherské Hradiště. He lived with his parents in Uherský Brod for 12 years where he also obtained his primary education, completing it in Oslavany near Brno. His father, a construction engineer, was mostly in charge of constructions away from home, his mother was an administrative worker. In 1959, he completed his secondary education by passing final examinations in Přerov where he had moved with his parents.

The life of Zdeněk Weiss was full of diligent and creative work, desire for knowledge, ambition and perseverance. Zdeněk Weiss chose physical sciences for his carrier. He obtained a university education at the Palacký University in Olomouc in 1964. After graduation he worked for one year as a teacher at the Secondary School of Economics in Český Těšín. He was then drafted into the army for one year and then worked as a teacher at the Secondary Technical School in Karviná till 1 February 1968. Following a successful selection procedure he started to work as a mathematician and programmer in the Research Coal-Mining Institute in Ostrava. For the first two years he worked as a senior engineer in programming and technical calculations. In 1970 he started to deal with applications of mathematical methods in crystallography and mineralogy for the purposes of a research program of the Research Coal-Mining Institute. In 1973 he defended his thesis at the Faculty of Science of the Charles University in Prague and obtained the title of Doctor of Natural Sciences. In the same year he joined the Palacký University in Olomouc as a postgraduate. In 1980 he defended his Candidate's thesis and was awarded the degree of



Candidate of Geological Sciences (roughly equivalent to a Ph.D.). From 1974 he was the head of the Mineralogy and Petrochemistry Department of the Chemical and Physical Section of the Research Coal-Mining Institute. In 1985, the Czechoslovak Academy of Sciences appointed him an independent researcher and in 1989 a senior researcher.

He started working in the Technical University of Ostrava after a successful selection procedure and in the same year he largely participated in the founding of the Central Analytical Laboratory. Extending of the research orientation of the Central Analytic Laboratory led to the founding of the University Institute of Material Chemistry in 2000. As Director of the University Institute of Material Chemistry he further participated in the research into and development of the nanostructure of phyllosilicates and carbonaceous materials, and in the research into nanomaterials based on modified clay minerals. He participated in founding the Centre of Advanced Innovative Technologies as the guarantor of nanotechnologies.

In his teaching carrier he concentrated on disciplines such as crystallography and chemistry of solid substances, methods of X-ray diffraction as well as on the properties of clay minerals and carbonaceous materials. He tutored many undergraduates and post-graduates in these disciplines. He prepared the curriculum of the interdisciplinary master's study program "Nanotechnology". He is the author or co-author of many renowned articles in specialist magazines and monographs such as "Clay minerals, their nanostructure and utilization" and "Nanostructure of carbonaceous materials". These papers and his successful teaching carrier were deservedly awarded when he was appointed Professor in the

Charles University in Prague in 1997. He applied his profound knowledge in the field of Crystallography and Mineralogy during his time in the Research Coal Institute in Ostrava – Radvanice where he worked for almost a quarter of a century. The original research works that he created ranked him among the renowned experts in the field not only in our country, but also abroad. He also shared his knowledge with the students of the College of Mines - Technical University in Ostrava where he worked as a hosting teacher as early as in 1975. In 1990 – 2000 he lectured mineralogical crystallography as a hosting teacher at the Charles University and also at the Masaryk University in 1996 – 1998. He was also invited as a visiting professor to specialized courses, e.g., in 1986 and 1988 to the University of Warsaw, in 1990 and 1993 to the Universities of Sienna and Padua, and in 1994 to the Imperial College of London.

Professor Weiss significantly contributed to the development of international research projects and he was the spiritual father of the cooperation with the American university SIU Carbondale in the area of friction materials research, where he spent 5 months from 1999 till 2001 within research stays. It was thanks to him that many post-graduates could go there and prepare the experimental part of their theses. Another part of the research was prepared for this

year. Prof. Weiss had already planned the program of his stay in the U.S.A. but the malign disease was stronger.

One of the characteristics of Professor Weiss was his remarkable ability to combine fundamental research with practical applications; therefore, his projects were so successful in receiving grants. The research plans and projects that he developed always had a clear vision and concrete objectives, without useless and general phrases and vaguely defined theses. The success of this researcher and pedagogue includes not only erudition and vision, but also the ability to make people enthusiastic about his projects and provide them with the necessary incentive. Professor Weiss was one of the lucky people who had all these characteristics. He never hesitated to bring personal sacrifice in working for “his” institute and discipline.

The initiative of Zdeněk Weiss will motivate us for a long time and we are thankful for it. We will do our best to pass it on and continue his work.

Zdeněk, we thank you.

*Václav Roubíček*