

František Hanic – Seventy Years Old



Associate Professor Dr. Ing. *František Hanic*, DrSc., the well-known Slovak scientist in the field of inorganic chemistry celebrated his seventieth birthday in December 1997.

He was born on December 16, 1927 in Lastovce in the eastern district of Slovakia. He graduated from the Faculty of Chemical Technology of the Slovak Technical University in Bratislava in 1951 and in 1953 he obtained his degree of Doctor. From 1952 to 1955 he prepared his dissertation on *The Structure of Tetrahedral Ions* MO_4^{n-} at the Institute of Solid State Physics of the Czechoslovak Academy of Sciences in Prague. In 1956 he received the degree CSc. and in 1964 he qualified as Associate Professor at the Faculty of Natural Sciences of the Comenius University in Bratislava. In 1966 he defended his dissertation *Crystal Chemistry of Coordination Compounds, Effect of Formation of the Complex on the Structure of Ligands*. Since 1955 he has been

working as an active member in the Institute of Inorganic Chemistry of the Slovak Academy of Sciences in Bratislava. He took an active part in its organization and research work. From 1963 to 1970 he headed the Institute of Inorganic Chemistry as its director. He was elected to the post of vicepresident of the Slovak Academy of Sciences for the period 1990–1992. In the recent years he took part in international scientific committees (COST, IUPAC) as well as in scientific boards of Slovak Universities (Slovak University of Technology – Faculty of Chemical Technology, Comenius University – Faculty of Natural Sciences).

The scientific work of F. Hanic concentrated on research into structure and crystal chemistry of inorganic compounds, and especially into relations between structure, composition, phase stability, and properties of inorganic substances. In this field he established the fundamentals of the theory of structural fields, which allows, on the basis of chemical composition, to assume the existence of the considered substance, its probable structure, the phase transition, and also changes in volume occurring on such transformations. He is the author of more than 160 scientific papers, many patents, and two comprehensive critical reviews in monographs. His works have been widely read and frequently cited (by date about 650 SCI citations). He presented his papers at approximately 100 international and national conferences. Besides this he participated at organization of several scientific conferences on solid state chemistry and physics in our country. Several international journals invited him to serve on their Editorial Boards.

Another field, where scientific work, papers, and lectures of F. Hanic have mutually contributed to the invaluable progress, is the materials chemistry research. The branches affected comprise mainly:

- The study of catalysts; concentrated on antioxidant and hydrogenous systems.
- Several topics in the field of ceramics; superionic solid electrolytes, phase equilibria in multicomponent oxide systems, high T_c superconductivity. Immediately after the first notes on the superconductivity above the $N_2(l)$ temperature F. Hanic is focusing his interest on bulk as well as thin layers of high-temperature YBCO (and doped) superconductors. He has characterized textured probes with low porosity, high current densities, and appropriate structure of pinning centres.
- The study of oxide and hydrated systems relevant in the chemistry and technology of cement and concrete; as the national coordinator of the RTD project of EC (Copernicus) he and his coworkers (in Slovakia, Romania, and U.K.) have proposed potential composition and, subsequently, are studying the basic characteristics together with an industrial exploitation of low-energy clinkers/cements.

On the occasion of his life jubilee all his colleagues and friends wish Associate Professor F. Hanic good health and further inventive ideas in his scientific work.

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