

In Memoriam Professor Otto Wichterle

With much regret we have received the news that Professor Dr. Ing. *Otto Wichterle*, DrSc., Honorary President of the Academy of Sciences of the Czech Republic, former president of the Czechoslovak Academy of Sciences, Doctor h. c. of several prestigious Universities as Polytechnic University of New York, University of Illinois, Chicago University, and Charles University of Prague and member of scientific societies and institutions in several countries died on August 18th, 1998.

Professor Wichterle was born on October 27th, 1913 in the town Prostějov in Moravia, Czech Republic into a family with an adventurous and thriving company producing agricultural machinery. After finishing High School education and graduation at the Technical University he took position of the lecturer at the Institute of Experimental Organic Chemistry at the Technical University in Prague and at the same time he enrolled as a student of Faculty of Medicine. His well-known interest in applying chemistry to medical needs can thus be traced more than 50 years back. His academic pursuits were interrupted in 1939, when the Czech Universities were closed by forces of occupation. From 1940 to 1945 he was Head of the Polymer Department of Bata Research Institute in Zlín. In 1943 he spent some time in Gestapo prison.

When the war ended, Professor Wichterle resumed his academic activities at the Technical University in Prague and Brno. In 1949 he became full professor of Organic and Macromolecular Chemistry at the Technical University in Prague. In 1952 he became a Corresponding Member of the Czechoslovak Academy of Sciences and he was appointed Dean of the Faculty of Organic Technology. From 1955 onwards, Professor Wichterle has been associated with the Czechoslovak Academy of Sciences initially as Head of the Department of Macromolecular Chemistry of the Institute of Chemistry and from 1959 for ten years as the founder and first Director of the Institute of Macromolecular Chemistry in Prague. Within Czechoslovakia at that time, Professor Wichterle served not only in the Academy of Sciences, of which he became full member in 1955 but also in Government in the Scientific Council of Ministry of Chemical Industry. On international level he is well-known for his work within the International Union of Pure and Applied Chemistry not only as the first president of its Macromolecular Division, but also as a member of the Bureau and the Executive Committee over period of almost 15 years.

During the well-known Prague Spring of 1968 Professor Wichterle took active part in the progressive political and human movement and he was coauthor of the document "Two thousand words" demanding freedom and democracy for peoples of Czechoslovakia. At that time Professor Wichterle was a member of the Czech National Council, President of Organizing Committee of the Society of Human Rights and President of the Union of Czechoslovak Scientific Workers. After the invasion of Warsaw Pact forces led by the Soviets, he insisted on his political and social attitude and took active part in the movement of human rights in Czechoslovakia. Therefore he was dismissed from all his positions including directorship of the Institute he has founded. During seventies and eighties conditions for scientific work and social activity were rather limited and he suffered various kinds of persecution. These lasted until November 1989 and it was only after overthrow of totalitarian regime that his merits were recognized and he was fully rehabilitated. Professor Wichterle was elected President of the Czechoslovak Academy of Sciences and he received a number of awards, including honorary doctor's degree on both Czechoslovak and international levels. He was elected Centennial Foreign Fellow of the American Chemical Society and Member of the German Academy of Sciences.

Professor Wichterle is one of the leading Czechoslovak chemists of his generation who considerably contributed to the basic knowledge in organic and macromolecular chemistry. He invented the alkaline polymerization of caprolactam (nylon-6). He is world-wide recognized as "Father" of soft hydrophilic lenses and as a pioneer in the application of hydrophilic gels as biomaterials which now represent a business with multimilliard turnover. In this connection, he designed new highly productive and cheap technology for production of soft lenses and founded theory of eye—lens optical and mechanical interactions. This theory enabled to minimize the inconvenience due to the presence of strange material in eye. Professor Wichterle published about 120 papers in various aspects of inorganic, organic, and macromolecular chemistry, polymer science and biomedical materials, 11 books and he is author or coauthor of about 200 patents. This clearly established him as an academic authority of the top rank.

During many contacts with Professor Wichterle many coworkers of the Polymer Institute of the Slovak Academy of Sciences have got to learn his logic way of thinking and his ability to solve problems in original way. The personality of Professor Wichterle was in many respects exceptional since he was able to apply his deep and broad knowledge in organic and macromolecular chemistry for solving many practical problems. In 1995 Professor Wichterle was awarded by The Golden Medal of the Slovak Academy of Sciences for his contribution to the development of macromolecular chemistry as well as for his contribution to industrial production of polyamides in Slovakia.

By the death of Professor Wichterle the Czech and world polymer science is losing the exceptional personality who can serve as an example for young chemists in selection and solving scientific problems and keeping his personal integrity under difficult political and social conditions.

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