

Obituary

Professor Friedrich Kohler (1924 to 2007)

Professor Friedrich Kohler, a noted Physical Chemist, died in Bochum, Germany, on the eighth of October 2007, at age 83. Born in Vienna, Austria on May 22, 1924, Kohler obtained his PhD in 1950 and Habilitation in 1959 both at the Institute of Physical Chemistry, University of Vienna, Vienna, Austria. At that institution, he was appointed Professor of Chemical Physics in 1971. In 1975, he accepted a Chair of Thermodynamics in the Faculty of Mechanical Engineering at Ruhr-University, Bochum, where he remained until his retirement in 1989.

Those who worked with Kohler knew he had many interests beyond the walls of the laboratory. His knowledge of the humanities was considerable, and he could stimulate discussions among his colleagues with depth and clarity of vision. He was also an activist and joined campaigns to prevent the destruction of a Natural Park on the River Danube and as a member of the Pughwash Conference strove for peace and nuclear disarmament.

Kohler's research interests lay in the thermodynamics of fluids spread equally across the theoretical and experimental aspects of the field. He studied ab initio quantum mechanical methods and developed equations of state based upon statistical mechanics as well as semiempirical and empirical methods. However, it was his experimental work and theoretical interpretations of the excess properties of mixtures including excess volumes, excess enthalpies, excess heat capacities, and excess Gibbs functions for which he will be remembered most. This work included the first reliable reports of the use of vibrating tube densimeters for measuring density and excess volumes of mixtures. Kohler also developed methods for purification and degassing of liquids and handling mixtures to obtain reliable results. In Bochum, he developed techniques for the measurement of the speed of sound to determine both ideal gas and compressed fluid properties. In general, his philosophy was to measure all the properties of a mixture in order to make a microscopic interpretation of the macroscopic properties with the appropriate use of theory and extensive spectroscopic data. Many of these concepts appeared in his book entitled *The Liquid State* published in 1972.

Kohler was also a scientific philanthropist, encouraging scientific endeavor in third world countries by donating equipment and working to dismantle political barriers at least between scientists. In the U.S.A., he established a student exchange scheme between Bochum and Texas A&M University that enriched both universities for a decade.

Finally, Fritz Kohler was a true gentleman and a very special friend. While his scientific skills created his reputation, those of us who had the privilege to know him found our personal relationship even more compelling. Fritz was a warm and caring human being whose presence made our lives better. He was many things to us: scientist, scholar, teacher, but most of all he was our friend.

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