

Academician Rudolf Brdička



The death of the Academician Rudolf Brdička, Director of Physical Chemistry of the Czechoslovak Academy of Sciences and Professor of Charles' University means a grave loss for the Czechoslovak chemical science.

R. Brdička was born on February 25, 1906 in Prague. After graduating from the Charles' University, Department of Natural Sciences in 1928, he became an assistant lecturer of the Institute of Physical Chemistry, where, under the guidance of Professor J. Heyrovský, was awarded the degree of „Doctor of Natural Sciences“ on the basis of his thesis on „Research of the Constitution of Pink and Blue Aqueous CoCl_2 Solutions“.

In 1934, on the basis of his thesis on „Catalytic Separation of Hydrogen in Ammonium Solutions of Cobalt in Presence of Proteins“ he became assistant professor. Within the period 1934—1935, he was work-

ing at Professor C. L. A. Smith at the University of California, Berkeley, studying reactions of glycine and alanine with carbonates and iodoacetic acid. From U.S.A. he returned home via Japan, China, Burma and India. In 1936, he studied polarography of blood colorants in Würzburg. During the fascist occupation he was a Grammar School teacher; since 1941 he worked at the Radiotherapeutical Institute in Prague concentrating on intensive laboratory investigation. After the liberation of our country he got back to the Institute of Physical Chemistry where, in 1948, he was appointed associate professor and, in 1949, Professor. After the establishment of the Czechoslovak Academy of Sciences he was nominated Academician and chairman of the Chemical Section of the Academy. Since 1952, he was head of the Laboratory of Physical Chemistry of the Czechoslovak Academy of Sciences from which, in 1955, there developed the Institute of Physical Chemistry. He was at the head of the Institute until his death on June 25, 1970.

Out of the scientific production of the Academician R. Brdička, there should primarily be quoted the wide-known and utmost sensitive polarographic method applied under the name „Brdička's reaction“ in cancer diagnosis and utilizing the different catalytic influence of both the sound and pathological blood sera proteins. Brdička's most remarkable papers are focused on the investigation of electrochemical processes, in which chemical reactions participate. Here, he made up a vast school solving the mechanism of chemical processes proceeding on the dropping mercury electrode. Thus, mechanisms of iron complexes reactions with peroxide, those of hydrogen, formaldehyde hydration, complexes dissociation, weak acids anions recombination with hydrogen, *etc.*, were investigated.

Brdička's learners who, studying electrochemical processes were able to master both the method and style of scientific work, founded, later on, a physico-chemical school in Czechoslovakia, such as quantum chemistry, molecular spectroscopy, physical chemistry of macromolecules, mass spectrometry *etc.*

Prof. R. Brdička's extraordinary merit consists in getting the University instruction

of physical chemistry to quite a high, up-to-date level. This was proved also by his outstanding textbook *Principles of Physical Chemistry* which lived to see several editions and was translated into foreign languages.

Despite all his commonly acknowledged merits, successes and honours (Order of Labour, Klement Gottwald's National Prize, Prize of the Land of Bohemia *etc.*), Professor R. Brdička never stopped being an extremely modest man with a friendly attitude to all of his co-workers, boundless conscientiousness and devotion lasting until a complete exhaustion.

May his decease ever mean an implacable loss for Czechoslovak science, still he did leave behind a legacy the value of which would be preserved for ever. All those who knew Professor R. Brdička will keep in lasting memory this great scientist and gently man.

V. Kellö