In Memory of Armin Weiss (1927–2010)

Armin Weiss (correctly “Weiß”) was born in Stefling (a small village near Regensburg, Bavaria, Germany) on November 5, 1927, as the youngest son of two elementary school teachers. After being a ‘Luftwaffenhelfer’ from December 5, 1944, until the end of the Second World War, he returned to Bavaria on July 5, 1945. He worked in a pharmacy until October 1945, after which he studied pharmacy (1947 ‘Vorexamen’ in pharmacy) and chemistry (1947–1951) at the University of Regensburg and the Technical University of Darmstadt (1951 diploma examination). Two years later, he completed the thesis (Technical University, Darmstadt, Prof. Dr. Ulrich Hofmann) on ‘Reaktionen im Inneren von Schichtkristallen’ (‘Reactions in the interlayer space of layered compounds’). In 1955, he passed the ‘Habilitation’ (Technical University of Darmstadt) with the thesis ‘Cyanide der Übergangselemente’ (‘Cyanides of the transition elements’). From 1961 to 1965 he was Professor (‘Extraordinarius’) of inorganic chemistry at the University of Heidelberg, and was then appointed as Professor (‘Ordinarius’) of inorganic chemistry at the University of Munich and held this position from 1965 to 1996.

Armin Weiss published many studies on the structure and properties of chalcogenides, silicides, germanides, cyanides, mercury compounds, and thiosalts. He reported the preparation and crystal-structure determination of a new modification of silicon dioxide consisting of infinite chains of SiO₄ tetrahedra sharing opposite edges.

About 120 publications (a third of his publications1) are related to the properties, reactions, and applications of clay minerals. His first publication (1951) was on ‘Batavit,’ a vermiculite-like mineral. As a student in Ulrich Hofmann’s group, he acquired a long-lasting interest in the study of clay minerals. He described fibrous vermiculite, wolchonskoite, and saponite. His main interest lay in the study of the ion exchange properties and the interlamellar reactions of the clay minerals, in particular in relation to organic compounds. In parallel with the studies of 2:1 clay minerals, he investigated the interlamellar reactions of various layer compounds such as titanates, phosphates, vanadates, uranium micas, graphite oxide, iron oxychloride, and earth alkali quadrates. He also described the two-dimensional swelling of many chain-like compounds.


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