

Mourning for Dr. Hans Boysen

He knew the research neutron source when it was still in its early stages and showed great commitment to the FRM II: On March 19, 2021, Dr. Hans Boysen died at the age of 76.

Born in 1944 in Karlsbad, Dr. Hans Boysen attended school in Flintbek and Kiel, where he later also began his physics studies. After his intermediate diploma, he was drawn to Bavaria, to the Ludwig Maximilian University in Munich. Following his physics diploma, he completed his doctorate there at the Institute of Crystallography and Mineralogy together with Prof. Friedrich Frey, who was to become his companion for over 35 years and more than 50 publications.

Great commitment to the Atomic Egg and FRM II

Already at the research reactor FRM, the so-called Atomic Egg, as well as later at the Research Neutron Source Heinz Maier-Leibnitz (FRM II), Hans Boysen had a major impact on the research. He was particularly involved in the planning, construction and utilization of the powder diffractometer SPODI at FRM II. He was also involved in an advisory capacity in the conception of the single crystal diffractometer RESI. In addition, his methodological work contributed to the development of focusing monochromators and special sample environments, for example with measurements at very high temperatures up to more than 2000 °C.

Hans Boysen's involvement went far beyond FRM II. Because of his broad expertise, he was active in national and international committees. He also contributed intensively to teaching at LMU Munich, where he supervised numerous student research projects, diploma theses, and doctoral dissertations.

"I greatly appreciated Hans Boysen because of his calm and sympathetic manner," said Dr. Martin Meven, instrument scientist at the Heinz Maier-Leibnitz Center's hot single-crystal diffractometer HEiDi. A sentiment shared by many other colleagues.

Boysen's research brought order into disorder

Boysen's scientific work focused on investigations of disorder and disorder phenomena using X-ray and neutron diffraction. This includes, for example, the characterization of oxygen and lithium ion conductors. "His work together with the evaluation methods presented in the process are of high current interest in energy storage and transport," emphasizes Dr. Markus Hölzel, scientist at the SPODI instrument and colleague of Hans Boysen.

For his outstanding achievements in the development of scattering methods for structural research and in the field of disorder crystallography, Dr. Hans Boysen, together with his long-time colleague Prof. Friedrich Frey, received the Will Kleber Commemorative Coin (<https://dgk-home.de/media/pdf/heft40.pdf#page=90>) of the German Society for Crystallography in 2010.