

## **We mourn the loss of our former colleague**

### **Prof. Dr. Alexei Erko**

who passed away on the 22nd of October 2022 at the age of 70 after a short and severe illness.

Alexei Erko worked for more than 20 years at the electron storage ring BESSY II. His worldwide renowned expertise in X-ray optics was a significant contribution to the successful research at synchrotron radiation sources.

Alexei Erko studied physics at the Moscow Institute of Physics and Technology, where he completed his PhD in 1981 and his habilitation in 1991. In 1993, he was appointed as a Professor of Experimental Physics. From 1978 to 1994, he worked as a scientist and later as Head of the Laboratory for X-Ray Optics and Technology at the Russian Academy of Sciences in Chernogolovka.

In 1994, Erko started working in the Optics workgroup of BESSY II. There, he was involved in the design and construction of crystal monochromator beamlines and worked on X-ray holography. In 2011, he became the Head of the newly established Institute of Nanometre Optics and Technology. In the same year, Freie Universität Berlin appointed him as an Honorary Professor for Experimental Physics. Up until his retirement in 2018, Erko and his team made important developments, in particular in the field of diffractive optics. This includes the construction of a grating production facility at HZB and the development of multilayer-coated diffraction gratings for the tender X-ray spectrum. The results of his groundbreaking work on reflection zone plates are still relevant to this day, and are applied at many synchrotron radiation and FEL sources. In recognition of his work, Alexei Erko received the 2018 European Innovation Award on Synchrotron Radiation.

After leaving HZB, in 2018, Alexei Erko became the Scientific Director of the Institute for Applied Photonics (IAP) in Berlin-Adlershof. There, he continued his work on reflection zone plates and dedicated himself to developing new possibilities for their application, for example in spectrometers at laboratory sources or in the field of laser physics.

With the passing of Alexei Erko, we have lost all too soon an outstanding, well networked and internationally highly esteemed scientist. We will deeply miss his modest and polite nature, his curiosity, his enthusiasm, and his open approach to discussing new ideas and solutions in science and technology.

Our thoughts go out to his family, his wife, his two children, and his grandchildren.



Prof. Dr. Bernd Rech  
Scientific Director



Thomas Frederking  
Director Finance and Administration



Jörg-Michael Heuser  
Chair of the Works Council