

Hans RABUS



Hans Rabus graduated in Physics at the Free University Berlin (Germany) in 1989. Continuing his experimental studies on the modification of organic molecules by metallic surfaces, he received his PhD in 1992 from the Free University Berlin with a thesis on this topic, shortly after joining the Berlin branch of the German National Metrology Institute PTB. After working almost nine years as a senior research scientist in synchrotron radiation metrology, he took lead of a working group in detector-based optical radiometry in 2000. During both periods he was *inter alia* engaged in the development and simulation of radiation detectors.

In 2005, he joined the Ionizing Radiation division of PTB in Braunschweig (Germany) to work in the fields of air kerma realization and Monte Carlo simulations, with an interim secondment to the Presidential staff department of PTB in 2007, where he was in charge of organizing the evaluation of PTB by the German science council. In 2009, Hans became head of PTB department "Fundamentals of Dosimetry" that was renamed to "Radiation Effects" in 2015. The department has currently 25 coworkers and performs research in the fields of nanodosimetry, track structure simulations, Monte Carlo code development including measurement of interaction cross sections, as well as radiobiological investigations using the PTB ion microbeam facility.

Hans joined EURADOS WG6 "Computational dosimetry" in 2009 and took lead of its task group 2 "Computational micro- and nanodosimetry" in 2012. He was organizer of the 6th EURADOS Winter School "Status and Future Perspectives of Computational Micro- and Nanodosimetry" in 2013 and of the EURADOS co-sponsored workshop "Challenges in micro- and nanodosimetry for ion beam cancer therapy (MIND-IBCT)" at Wiener Neustadt in 2014. From 2012-2015 Hans coordinated the European joint research project "Biologically Weighted Quantities in Radiation Therapy (BioQuaRT)" which laid the foundations for novel radiation quantities that are better correlated with the biological effects of ionizing radiation.

Since 2018, Hans is chair of EURADOS Working Group 6 "Computational Dosimetry".