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Short biography:

Dr. Binek is Professor in the Department of Physics and Astronomy at the University of Nebraska-Lincoln, USA since 2003. He received his Ph.D. in Germany at the University of Duisburg-Essen in 1995, followed by a Habilitation in 2001 which gave him the opportunity to experience numerous research stays abroad including neutron diffraction in Grenoble, France and calorimetry at the RIKEN institute in Tokyo/Wako, Japan. In 2013 Dr. Binek has been Visiting Professor at nanoGUNE in San Sebastian, Spain. His main research interest lies in magnetic interface effects, with emphasis on voltage controlled magnetism and spintronics, as well as fundamental thermal physics. This is documented in more than 100 publications in peer reviewed journals with over 2300 citations. Dr. Binek is author of various book chapters, a monograph entitled "Ising-type Antiferromagnets: Model Systems in Statistical Physics and in the Magnetism of Exchange Bias" published in 2003 in the Springer Series STMP, and co-author of a textbook on fundamental thermal physics published in 2014 by Wiley. He is NSF CAREER and 2007 Sigma Xi outstanding young scientist awardee. Dr. Binek leads the interdisciplinary research group 1 on magnetoelectric materials and functional interfaces of Nebraska's NSF funded Materials Research Science Engineering Center. He leads theme 1 on magnetoelectric devices in the Center for Nanoferroic Devices and a theme on magnetoelectric elements for logic, both funded by the Semiconductor Research Corporation through the Nanoelectronics Research Initiative. Dr. Binek is principal investigator in the project on magnetoelectrics and spinorbitronics in topological heterostructures and superlattices awarded in 2016 in the framework of the Multidisciplinary Research Program of the University Research Initiative. Dr. Binek works as principal investigator in theme 1 of the Center for Spintronic Materials, Interfaces and Novel Architecture funded via Starnet and DARPA and serves as Associate Director of the Nebraska Nanoscale Facility, an NSF funded regional center of excellence in nanoscience and nanotechnology.