

## **Dr. Alexander Chizhik**



Alexander Chizhik graduated in 1982 from Kharkov State University, Ukraine. In 1991 received Ph.D. degree from Institute for Low Temperature Physics and Engineering of National Academy of Science of Ukraine. About 20 years he was employed in this Institute.

His activities at this institute were devoted to the study of magnetic phase transitions in magnetic dielectrics, the dynamics of domain walls at low temperatures. A unique combination of low-temperature techniques and high-speed photography made it possible to establish the patterns of high-speed phase transitions.

Also, the effect of high-temperature photo-induced magnetic transition that he discovered laid the foundation for extensive research into high-speed magnetic research in garnets.

From 2002 he works in University of Basque Country, San Sebastian, Spain. As part of the global task of optimizing the functioning of magnetic sensors based on magnetic wires, he performs the magneto-optical investigations of magnetic microwires. Being a pioneer in this scientific area, he created original line of the magneto-optics of cylindrically shaped objects. The result of this research was the publication of a book Alexander Chizhik and Julian Gonzalez, "Magnetic Microwires. A Magneto-Optical Study". In recent years, he has focused on the study of a new class of magnetic structures - helical domain structures in microwires, which play an essential role in magneto-electric transient processes.

He have published about 180 articles in scientific journals and presented about 130 presentations in the scientific congresses. H factor is 20.