



Centre for Research in Ceramics
and Composite Materials-CICECO



Dr. Andrei Kholkin

Research Coordinator, Head of Laboratory

Center for Research in Ceramic and Composite Materials (CICECO) &
Department of Materials and Ceramic Engineering, University of Aveiro,
Portugal

Andrei Kholkin has received his M.Sc. degree in Physics from the St. Petersburg State University and Ph.D. degree in Solid State Physics from the A. F. Ioffe Physical-Technical Institute of the Russian Academy of Sciences. His Ph.D. thesis supervisor was Prof. G. A. Smolensky, a pioneer of ferroelectricity and multiferroicity in Russia and worldwide. Until 1993 he has been a research staff member of the Laboratory of Ferroelectricity and Magnetism at Ioffe Institute where he studied kinetic phenomena in ferroelectrics and high-temperature superconductors including ferroelectric field effect. Since 1993, he has been working outside Russia and held several research positions at Leibniz Institute for Solid State and Materials Research (Germany), at Swiss Federal Institute of Technology (Switzerland) and at Rutgers University (USA). He is currently a research coordinator and head of functional imaging and nanocharacterization laboratory of the Center for Research in Ceramic and Composite Materials (CICECO) of the University of Aveiro (Portugal). His group develops novel multifunctional materials (including ferroelectrics, multiferroics, biomaterials, and ionic conductors) and scanning probe microscopy techniques such as Piezoresponse Force Microscopy and Electrochemical Strain Microscopy for their study. His current research interests spans from multiferroics (bismuth ferrite and magnetoelectric composites) to ferroelectric biomaterials and energy harvesting systems and to grapheme/grapheme oxide.

He has over 400 technical papers in the area of functional materials including numerous reviews and book chapters. He was a coordinator of three European projects on multifunctional materials and coordinated many national and bilateral programs. He currently serves as an Associate Editor-in-Chief for the IEEE Transactions on Ultrasonics, Ferroelectrics and Frequency Control (TUFFC). He is a member of editorial boards of several scientific journals and serves in advisory boards of international conferences on ferroelectrics. He was a guest editor of four Focused Issues of Journal of Applied Physics (2010-2013), Special Issue of MRS Bulletin on Nanoelectromechanics (2009), Special Issues of Ferroelectrics and Transactions on Ultrasonics, Ferroelectrics and Frequency Control (2006-2007, 2012)

He is currently a co-chair of the Technical Program Committee of the next IEEE ISAF-ISIF-PFM conference in Singapore (2015). During last several years he was a co-chair of the International Conference PFM-2014 (Russia), co-chair of Technical Program Committee of the Joint IEEE UFFC Symposium (Czech Republic, 2013), general chair of the 22nd ISAF conference (Portugal, 2012), general co-chair of the 21th ISAF conference (Canada, 2011), and general chair of the 6th and 11th European Conferences on Applications of Polar Dielectrics (ECAPD). Also, he was a co-founder of the new conference series "Piezoresponse Force Microscopy and Nanoscale Phenomena in Polar Materials (PFM)" started in 2009 in Portugal and continued in Japan, Canada, China, Czech Republic, Russia, Singapore, and Germany.

Dr. Kholkin is a member of the Ferroelectric Committee and Ferroelectric Web Editor of IEEE. He was a recipient of the "Excellency" award from the Portuguese Foundation for Science and Technology (FCT) in 2004. Dr. Kholkin was awarded by the title of IEEE Fellow in 2012 "*for contributions to electromechanical characterization methods and applications*".

Dr. Kholkin was a visiting professor/researcher at a number of research organizations and Universities across the globe: Shonan Institute of Technology (Japan), Materials Science Institute (Spain), Prince of Songkla University (Thailand), Institute of Physics (Latvia), University of Oulu (Finland), Université de Valenciennes, Université de Picardie Jules Vernes, Ecole Centrale Paris (France), University of São Paulo (Brazil), and Ural State University (Russia).