

Maxim Zhadobov, IETR/CNRS, France



Maxim Zhadobov is Senior Research Scientist in Biomedical Electromagnetics at the Institute of Electronics and Digital Technologies (IETR), French National Center for Scientific Research (CNRS), France. He received the PhD degree in Bioelectromagnetics in 2006 from the University of Rennes, France. After a post-doctoral fellowship at the Center for Biomedical Physics, Temple University, Philadelphia, USA, he rejoined IETR / CNRS. Currently he is in charge of the Electromagnetic Waves in Complex Media (eWAVES) research group of the IETR.

His main research activities and expertise are in the field of exposure assessment and innovative biomedical applications of electromagnetic fields. With the supervised PhD students and post-doctoral researchers, he was at the origin of various innovations in biomedical electromagnetics and body-centric wireless technologies including the first millimeter-wave tissue-equivalent phantoms, novel reflectivity-based surface phantom concept, multi-physics characterization techniques, new APD measurement method, millimeter-wave textile antennas for smart clothing, first reverberation chamber above 10 GHz and multi-physics tools for EMC testing. He co-authored 5 book chapters and more than 90 research papers in peer-reviewed international journals, mainly in the field of bioelectromagnetics. His review article in the *Int. J. Microwave Wireless Techn.* "Millimeter-wave interactions with the human body" has been the most cited paper of the journal since 2016. A paper published by his research group in 2019 on EM-based destruction of cancer cells is in "Journal Top 100" of *Nature Scientific Reports*. He has been involved in 25 research projects in the field of bioelectromagnetics (13 as PI). He served as member of the Council of European Bioelectromagnetics Association (EBEA) from 2017 to 2022 and as a TPC co-chair of BioEM 2020 and BioEM 2021 conferences. He contributed as a TPC member or session organizer to various conferences, including AES 2023, EUMW 2022, IEEE IMBioC 2022, AT-AP-RASC 2022, BioEM 2019, EuMW 2019, IEEE iWEM 2017, MobiHealth 2015-2017, BodyNets 2016, and IMWS-Bio 2014. Currently he is president of URSI France Commission K "Electromagnetics in Biology and Medicine" and member of IEC TC106 "Methods for the assessment of electric, magnetic and electromagnetic fields associated with human exposure" (JWG 11/12). He is Associate Editor of the *IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology*. He lectured bioelectromagnetics at ESoA (UK), 5G PhD School (IT), EUMW PhD School (IT), Uppsala Univ. (SE), Univ. Rennes, and INSA (FR). Dr. Zhadobov was recipient of the EBEA Alessandro Chiabrera Award for Excellence in Bioelectromagnetics 2015.

"Electromagnetic fields became an ubiquitous part of our environment. The wide diversity of artificially-induced electromagnetic exposures requires their intelligent and safe integration with the living systems. The diversification of human-centered use cases and continuous progress in electromagnetic technologies rise new questions and challenges to the bioelectromagnetic community, including aspects related to fundamental physical and biological interactions from micro to macro scale, potential health impacts, exposure evaluation and reduction, biomedical applications (for monitoring, diagnostic and treatment), epidemiological and social aspects, environmental sustainability, to list just a few. I believe the experience I gained participating for four years in EBEA council and its various committees as well as serving as BioEM conference TPC member and co-chair in 2020 and 2021, would be valuable and serve to the BioEM society to help our society to maintain the leading position in the field and succeed in all initiatives."