

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. He was in charge of the Electromagnetic Waves in Complex Media (eWAVES) research group of the IETR till December 2024.

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 with multi-physics tools for bioEM experiments. He co-authored 5 book chapters and more than 100 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 31 research projects in the field of bioelectromagnetics (16 as PI). He has been a member of BioEM board since 2024, served as member of the Council of European Bioelectromagnetics Association (EBEA) from 2017 to 2022. He contributed as a TPC/LOC member and/or session organizer at international conferences, including BioEM2025, IEEE AP-S/URSI 2024, URSI AT-RASC 2024, AES 2023, BioEM 2023, EUMW2022, IEEE IMBioC 2022, AT-AP-RASC 2022, BioEM 2019, EuMW 2019, IEEE iWEM 2017, MobiHealth 2015–2017, BodyNets 2016, and IMWS-Bio 2014. He was the president of URSI France Commission K "Electromagnetics in Biology and Medicine" till 2025 and currently serves as a 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 wireless 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, serving as BioEM conference TPC member and co-chair in 2020 and 2021, and as a BioEM board member for the last two years will be valuable to help our society to maintain the leading position in the field and succeed in all initiatives."