

Dr. Alina Holban (32) is acting as Researcher and Teaching Assistant at the Dept. of Microbiology and Immunology, Univ. of Bucharest. She holds a Bachelor degree in Experimental Biology (Faculty of Biology, University of Bucharest (UB), 2004-2008), a M.Sc. degree in Genetics, Microbiology and Biotechnology (UB, 2008-2010) She defended her PhD thesis on the field of molecular microbiology in 2013 and between 2014-2015 she completed a Postdoctoral training at the University Politehnica of Bucharest, developing smart nanomaterials functionalized with plant-derived compounds with antibacterial activity. To date Alina achieved 2 international research internships (1 year) in UK, 1 international course in drug development (Austin, Texas), 1 international prize (Taiwan), 1 national prize and 3 travel grants. Current research focuses on alternative therapeutic approaches (by using nanotechnology, natural molecules and signalling modulators) to reduce microbial resistance and manipulate virulence and biofilms. Alina is currently acting as a research team member in three national research projects, Director for one national research project, and Responsible for 1 national partnership on the field of antimicrobial nanoparticles. She published 41 papers, 1 monograph and 7 book chapters on the field of antimicrobial nanostructures and coatings. H-index is 11 and she accounted for 846 citations, according to Google Scholar.

Google Scholar Profile: https://scholar.google.ro/citations?user=1Px1JYAAAAAJ

Professional skills: molecular microbiology, tissue cultures, animal models, nanotechnology, host-pathogen interactions, genetic engineering, molecular signalling.

Relevant publication for the proposed project:

1. AS Guzun, M Stroescu, SI Jinga, G Voicu, AM Grumezescu, **AM Holban**: Plackett-Burman experimental design for bioactive bacterial cellulose-silica composites synthesis with antimicrobial adherence effect, Mater. Sci. Engineer. C, 42, 280-288, **2014**.
2. **AM Holban**, V Grumezescu, AM Grumezescu, B Vasile, R Trușcă, R Cristescu, G Socol, F Iordache: Anti-microbial nanospheres thin coatings prepared by advanced pulsed laser technique, Beilstein Journal of Nanotechnology, 5, 872–880, **2014**.
3. I Liakos, AM Grumezescu, **AM Holban**: Magnetite nanostructures as novel strategies for anti-infectious therapy, Molecules, 19, 12710-12726, **2014.**
4. **AM Holban,** MC Gestal, AM Grumezescu. Control of biofilm-associated infections by signalling molecules and nanoparticles. Internat. J. of Pharm., doi:10.1016/j.ijpharm.2016.02.044**, 2016**.
5. AG Anghel, AM Grumezescu, M Chirea, V Grumezescu, G Socol, F Iordache, AE Oprea, I Anghel, **AM Holban**: MAPLE fabricated Fe3O4@Cinnamomum verun antimicrobial surface for improved gastrostomy tubes, Molecules, 19, 8981-8994, **2014**.