PhD. Student Tudor VASILIU

Research assistant: 2016 – "Petru Poni" Institute of Macromolecular Chemistry (ICMPP);

Education: 2016: Msc Natural Biopolymers and Bioresources, University "Gh. Asachi"; 2014: BSc Bioengineering University of Medicine and Farmacy"Gr. T. Popa"

Visiting Researcher: Institut de Biologie Physico-Chimique (France) 2017, University of Cagliari (Italy) 2019.

Project experience: Team member – 4

International and national conferences/symposia: 10 presentations and posters

Winter/Summer Schools & workshops: – Scientific Summer School "Molecular Modeling: Real Applications and New Approaches", 29th July- 2nd August 2019 - at the Technology Park of Sardinia Pula, Sardinia - Italy

Expertise fields: Molecular dynamic simulations at all atom level and coarse grain level of: ion and water channels through lipid membranes and polymeric non-viral vectors and DNA complexation. Advance simulation techniques including but not limited to: Umbrella sampling, replica exchange and simulating annealing. Developing in-house scripts used for data analysis. Familiar with specialized molecular modeling programs (Gaussian, VMD, NAMD, YASARA, Auto Dock and Auto Dock Vina, Gaussian View, Avogadro, Molden, Maestro Schrödinger, Magic, Gromacs, Amber, Galamost). Familiar with multi scale modeling theories (DFT and TD-DFT, ab initio, molecular dynamics, semiempirical, ab initio molecular dynamics, hybrid theory such as QM/MM, Coarse Grain Models).

Scientific achievements: Molecular dynamic simulations at all atom level and coarse grain level of: ion and water channels through lipid membranes and polymeric non-viral vectors and DNA complexation. Developing in-house scripts used for data analysis using bash, python, c++. **7** publications in ISI indexed journals, h-index (Google Scholar): 3.