

Curriculum Vitae: Mgr. Kříž Kristian

Born: April 26, 1991, Kladno

Nationality: Czech

Status: unmarried

Languages: English fluent

Research interests: quantum chemistry, semiempirical quantum chemistry methods, protein-ligand binding, noncovalent interactions, drug design

Education:

2011-2014 Bachelor studies of biology, Faculty of Science, Charles University of Prague. Bachelor thesis: The use of viral nanoparticles for biomedicine

2014-2016: Master's studies of biology, molecular biology genetics and mikrobiology, Faculty of Science, Charles University of Prague. Master's thesis: Nonclassical noncovalent interactions in proteins and their importance for design of novel specific viral enzyme inhibitors

2016-present: PhD studies of physical chemistry, Faculty of Science, Charles University of Prague; Being carried out at Inst. of Organic Chemistry and Biochemistry, Prague

Publications:

Kříž, K.; Lepšík, M. Fanfrlík, J. Chalcogen Bonding in Protein–Ligand Complexes: PDB Survey and Quantum Mechanical Calculations. *ChemPhysChem* **2018**, 19, 2540-2548.

Kříž, K.; Řezáč, J. Reparametrization of the COSMO Solvent Model for Semiempirical Methods PM6 and PM7. *J. Chem. Inf. Model.* **2019**, 59, 229-235.

Kříž, K.; Řezáč, J. Benchmarking of Semiempirical Quantum-Mechanical Methods on Systems Relevant to Computer-Aided Drug Design. *J. Chem. Inf. Model.* **2020**, 60, 1453–1460.

Conferences:

WATOC (World Association of Theoretical and Computational Chemists), Munich 2017, Poster: “Testing semiempirical quantum mechanical methods on model systems relevant to computer-aided drug design”

MDMM (Modeling & Design of Molecular Materials), Polanica-Zdrój 2018, Poster: “Testing semiempirical quantum mechanical methods on model systems relevant to computer-aided drug design”

ICNI (International Conference on Noncovalent Interactions), Lisbon 2019, Poster: “**Testing of Semiempirical Quantum Mechanical Methods on Model Systems Relevant in Drug Design**”