

SLAVICA OLJAČIĆ

Employment Information:

- 2014-Present Assistant Professor, Department of Pharmaceutical Chemistry, University of Belgrade-Faculty of Pharmacy, Serbia
- 2007-2014 Teaching Assistant, Department of Pharmaceutical Chemistry, University of Belgrade-Faculty of Pharmacy
- 2005-2007 Teaching Associate, Department of Pharmaceutical Chemistry, University of Belgrade-Faculty of Pharmacy

Education:

- 2013–PhD, defended PhD thesis entitled: "Quantitative structure activity/retention relationships of imidazoline and α_2 adrenergic receptors ligands" mentored by Professor Danica Agbaba, and Assistant Professor Katarina Nikolić, University of Belgrade-Faculty of Pharmacy, Serbia
- 2005– BSc, University of Belgrade-Faculty of Pharmacy, Serbia

Training:

- September 2014, Short Term Scientific Mission at the Department of Biochemistry and Molecular and Cellular Biology, University of Zaragoza, Spain (Cost Action CM1103)
- August 2014, Workshop "Introduction to Cheminformatics and QSAR Modeling using the MOE Platform" St. Petersburg, Russia
- September 2013, COST CM1103 Training School: "Structure-based drug design for diagnosis and treatment of neurological diseases", Istanbul, Turkey
- September 2009, "Vienna Summer School on Drug Design", Vienna, Austria
- 2007-2010 Short Term Scientific Missions (4 months) at the Laboratory for Food Chemistry, National Institute of Chemistry, Ljubljana, Slovenia

Academic awards and distinctions:

- Award for the best scientific work at the Faculty of Pharmacy, University of Belgrade for 2012/2013 academic year
- The Scholarship of the Municipality of Krupanj for undergraduate students
- The Scholarship of the Ministry of Education of Republic of Serbia for undergraduate students

Teaching activities:

- Teaching activities involved in the Integrated Academic Studies (Master of Pharmacy) for Pharmaceutical Chemistry I, II and III; Lectures for Pharmaceutical Chemistry II
- **Mentor of the doctoral thesis:**
 “Quantitative structure retention relationships of selected alpha adrenergic and imidazoline receptors ligands in thin layer chromatography“(candidate: Musbah Shenger, 13.04.2017. University of Belgrade-Faculty of Pharmacy)
- **Membership in Committees for doctoral thesis:**
 1. “The effect of surfactants on protolytic equilibria and isomerization of ACE inhibitors”(candidate: Marija Popović, 03.09.2015. University of Belgrade-Faculty of Pharmacy)
 2. “2D and 3D QSAR study of xanthen-3-one and xanthen-1,8-dione derivatives” (candidate: Selma Zukić, 28.10.2020. University of Sarajevo-Faculty of Pharmacy)
- **Mentor of student graduation theses**
 1. “Solubility of diazepam - literature review” (student: Srđan Milinković, 16.07.2015.)
 2. “Determination of levofloxacin by reverse-phase liquid chromatography” (student: Danijela Mišković, 17.07. 2015.)
 3. “Optimization of chromatographic conditions for separation of ziprasidone and its impurities by thin layer chromatography” (student: Darija Obradović, 24.09. 2015.)
 4. “Protolytic equilibria of ACE inhibitors - literature review” (student: Sanja Jovičić, 09.10. 2015.)
 5. “Investigation of lipophilicity and retention behavior of selected imidazoline derivatives by thin layer chromatography” (student: Katarina Mladenović, 09.10. 2015.)
 6. “Optimization and validation of the liquid chromatography method for the determination of moxonidine and its impurities (student: Milica Elek, 11.07. 2016.)

Textbooks:

- Praktikum za eksperimentalne vežbe iz Farmaceutske hemije III, Katarina Nikolić, Slavica Filipić, Milkica Crevar Sakač

Activities within the Faculty:

- 2015-2016 Member of the Commission for monitoring and improving the quality of teaching
- 2015/2016 Member of the Commission for Student Safety
- 2015-2016 President of the Council of the third year
- 2014- Member of the Enrolment Commission at the Faculty of Pharmacy, University of Belgrade
- 2014 - Member of the QMS Working group

Activities within wider Academic Community:

- Member of the Commission for the evaluation of students works "9. Mini-Congress of the Center for Scientific Research of Students " University of Belgrade-Faculty of Pharmacy (April 13, 2016)
- 2016. Member of the Commission for papers review "The 2017 International Conference on Medical and Biological Engineering" CMBEBIH2017, 16-18 March 2017. Sarajevo, Bosnia i Hercegovina
- Member of the Pharmaceutical Association of Serbia
- Member of the Commission for Evaluation of Students' Scientific Works at "56th Congress of students of biomedical sciences of Serbia with international participation", Kopaonik, May 2013.
- Reviewer for international scientific journals: Electrophoresis, Bioorganic Chemistry, Journal of Pharmaceutical and Biomedical Analysis, Journal of the Taiwan Institute of Chemical Engineers, Journal of Liquid Chromatography and Related Technologies, Acta Chromatographica, The Journal of AOAC International, Archives of Pharmacy.

Projects:

2019-2023 European Research Network on Signal Transduction (ERNEST), COST Action CA18133 (Management Committee Substitute)

2016-2020 Multi-target paradigm for innovative ligand identification in the drug discovery process (MuTaLig), COST Action CA15135 (Management Committee Member)

2016/2017 Neural networks and QSAR in the design and synthesis of pharmacologically active xantens (Participant in Project funded by Federal Ministry of Education and Science, Sarajevo, BiH)

2011–present Fundamental Research Project in the field of chemistry: “*Synthesis, Quantitative Structure Activity Relationship studies, Physico-Chemical Characterization and Analysis of Pharmacologically Active Substances*“ (Project No. 172033) funded by Ministry of Education, Science and Technological Development of Republic of Serbia

2011–2015 “Structure-based drug design for diagnosis and treatment of neurological diseases: dissecting and modulating complex function in the monoaminergic systems of the brain”, COST Action CM1103

2008–2011 “Free Radicals in Chemical Biology (CHEMBIORADICAL)“, COST Action CM0603

2006–2010 Fundamental Research Project in the field of chemistry: “*Synthesis, Quantitative Structure/Properties and Activity Relationship studies, Physico- Chemical Characterization and Analysis of Pharmacologically Active Substances*” (Project No. 142071) funded by Ministry of Education, Science and Technological Development of Republic of Serbia

2008–2009 Bilateral project between the Faculty of Pharmacy, University of Belgrade, Serbia and the National Institute of Chemistry, Ljubljana, Slovenia: “*Determination of active ingredients in dietary supplements*”, Project coordinators Prof. dr. Danica Agbaba and dr. Irena Vovk

2005–2007 Bilateral project between the Faculty of Pharmacy, University of Belgrade, Serbia and the National Institute of Chemistry, Ljubljana, Slovenia “*Chromatographic methods in analysis of pharmacologically active compounds, investigation of QSPR and QSAR*”, Project coordinators Prof. dr. Danica Agbaba and dr. Irena Vovk

Publications:

- Zukic S., Oljagic S., Nikolic K., Veljovic E., Spirtovic-Halilovic S., Osmanovic A., Završnik D. Quantitative structure-activity relationships of xanthen-3-one and xanthen-1,8-dione derivatives and design of new compounds with enhanced antiproliferative activity on HeLa cervical cancer cells. *J Biomol Struct Dyn*, 2020.
- Obradovic D., Oljagic S., Nikolic K., Agbaba D. Investigation and prediction of retention characteristics of imidazoline and serotonin receptor ligands and their related compounds on mixed-mode stationary phase. *J Chromatogr A*, 2019; 1585, 92-104.
- Vucicevic J., Popovic M., Nikolic K., Filipic S., Obradovic D., Agbaba D. Use of biopartitioning micellar chromatography and RP-HPLC for the determination of blood-brain barrier penetration of alpha-adrenergic/imidazoline receptor ligands, and QSPR analysis. *SAR QSAR Environ Res* 2017, 2, 235-252.
- Filipic S., Ruzic D., Vucicevic J., Nikolic K., Agbaba D. Quantitative structure-retention relationship of selected imidazoline derivatives on alpha(1)-acid glycoprotein column. *J Pharm Biomed Anal* 2016, 127, 101-111.
- Butini S., Nikolic K., Kassel S., Brueckmann H., Filipic S., Agbaba D., Gemma S., Brogi S., Brindisi M., Campiani G., Holger S. Polypharmacology of dopamine receptor ligands, *Prog Neurobiol* 2016, 142, 68-103.
- Popovic M., Popovic G., Filipic S., Nikolic K., Agbaba D. The effects of micelles of differently charged surfactants on the equilibrium between (Z)- and (E)-diastereomers of five ACE inhibitors in aqueous media. *Monats Chem* 2015, 146, 913-921.
- Filipic B., Nikolic K., Filipic S., Jovic B., Agbaba D., Antic Stankovic J., Kojic M., Golic N. Identifying the CmbT substrates specificity by using a quantitative structure-activity relationship (QSAR) study. *J Taiwan Inst Chem Eng* 2014, 45, 764 – 771.
- Bautista-Aguilera O. M., Samadi A., Chioua M., Nikolic K., Filipic S., Agbaba D., Soriano E., de Andrés L., Rodríguez-Franco M. I., Alcaro S., Ramsay R. R., Ortuso F., Yañez M., Marco-Contelles J. N-Methyl-N-((1-methyl-5-(3-(1-(2-methylbenzyl)piperidin-4-yl)propoxy)-1H-indol-2-yl)methyl)prop-2-yn-1-amine, a New Cholinesterase and Monoamine Oxidase Dual Inhibitor. *J Med Chem* 2014, 57, 10455–10463.
- Shenger M., Filipic S., Nikolic K., Agbaba D. Estimation of Lipophilicity and Retention Behavior of Some Alpha Adrenergic and Imidazoline Receptor Ligands Using RP-TLC. *J Liq Chromatogr Relat Technol* 2014, 37, 2829-2845.

- Filipic S., Nikolic K., Vovk I., Krizman M., Agbaba D. Quantitative structure-mobility relationship analysis of imidazoline receptor ligands in CDs-mediated CE. *Electrophoresis* 2013, 34, 471-482.