

NAME AND FAMILY NAME

Slavica Erić

Employment Information

2016 - now: Full time professor, Department of Pharmaceutical Chemistry, University of Belgrade-Faculty of Pharmacy

2010: Associate professor, Department of Pharmaceutical Chemistry, University of Belgrade-Faculty of Pharmacy

2005: Assistant Professor, Department of Pharmaceutical Chemistry, University of Belgrade-Faculty of Pharmacy

1999: Assistant, Department of Pharmaceutical Chemistry, University of Belgrade- Faculty of Pharmacy

1995: Teaching associate at Department of Pharmaceutical Chemistry, University of Belgrade-Faculty of Pharmacy

1992: Associate at Department of Pharmaceutical Chemistry, University of Belgrade- Faculty of Pharmacy

Education

2014: Specialization in Drug Quality Control

2006-2007: Post doc in physico-chemical characterization of drugs, Sirius Analytical Instruments, UK

2004: Doctoral dissertation "Molecular modelling and correlation of quantitative structure activity and selectivity relationships of α_1 adrenergic antagonists". University of Belgrade-Faculty of Pharmacy, in collaboration with National Institute of Chemistry, Ljubljana, Slovenia

1998: Master thesis "The influence of cephalosporins on formation of ferrum (III)- hydroxamates and retention behavior in planar chromatography", University of Belgrade. Faculty of Pharmacy

1991: Bachelor of Pharmacy, University of Belgrade-Faculty of Pharmacy

Training

2006: 'Training Course on GLpKa/PCA200-pKa and logP measurements including experimental procedures and supervised calculation techniques', Sirius Analytical Instruments, UK

2006: 'Training Course on D-PAS-pKa measurements including experimental protocols and supervised calculation techniques', Sirius Analytical Instruments, UK

2001-2004 (15 months): Training in Laboratory for Chemometrics (prof. Jure Zupan) and Laboratory for molecular modelling (prof. Tomaž Šolmajer) at National Institute of Chemistry, Ljubljana, Slovenia

1991-1992: Training in Biochemical Laboratory of Clinical Center of Serbia

Academic awards and distinctions

2002 and 2003: PhD fellowships in Slovenia (Ministry of Education, Science and Technological Development of Republic of Slovenia)

2001: Award for best researchers in chemistry (Ministry of Education, Science and Technological Development of Republic of Serbia)

Teaching activities

A. Undergraduate studies

1. Pharmaceutical chemistry 1 (Physico-chemical characterization of drugs; Mechanisms of drug action on molecular level; Qualitative and quantitative structure-activity relationships)
2. Drug design and synthesis (Drug discovery, Rational drug design, Computer-aided drug design)

3. Selected topics in Pharmaceutical Chemistry (Anticancer drugs-resistance, toxicity and selectivity)

B. *PhD studies*

1. Target drug design
2. Advanced methods in drug research

C. *Qualified Person for Drug Approval*

Pharmaceutical-medicinal chemistry

She was mentor of 3 defended doctoral thesis, 1 master thesis and 2 specializations required by health care system, as well as member of Comities for defense of 1 PhD and 2 academic specializations.

Textbook

1. Book for practical exercises in Pharmaceutical Chemistry 1 S. Eric, J. Brboric, B. Markovic, B. Ivkovic; University of Belgrade-Faculty of Pharmacy, Belgrade 2015.
2. Book for practical exercise in Pharmaceutical Chemistry 2 O. Cudina, S. Eric, V. Dobricic, University of Belgrade-Faculty of Pharmacy, Belgrade 2018.

Activities within the Faculty

2011-2012: Member of Program Council for Continued Education

2011-2012: Member of Website Redaction of Faculty of Pharmacy, University of Belgrade

2013-2014: Member of the Commission for following and advancing postgraduate studies at Faculty of Pharmacy

2007-2008: Member of Commission for research work of students

2003-2004: Member of working group for creation of Sillabus of Faculty of Pharmacy at University of Belgrade

Activities within wider Academic Community

2019: Organizer and lecturer of continuing education "Advanced pharmacotherapy of cancer from the aspect of action on molecular level", Faculty of Pharmacy, University of Belgrade

2013: Organizer and lecturer of seminar "The application of SimulationsPlus software in pharmacy and chemistry", Faculty of Pharmacy, University of Belgrade

2002: Lecturer at course of continuing education "Development of new drugs by application of theoretical and experimental methods ", Faculty of Pharmacy, University of Belgrade

2001: Lecturer at course for continuing education "Treatment of diabetes on molecular-chemical bases", Faculty of Pharmacy, University of Belgrade

Reviewer for journals: European Journal of Medicinal Chemistry, Current Medicinal Chemistry, SAR and QSAR in Environmental Research, Molecular Pharmaceutics, Journal of Molecular Recognition, QSAR&Combinatorial science, Journal of Pharmaceutical and Biomedical Analysis, Journal of the Serbian Chemical Society, Acta Chromatographica, Архив за фармацију

Projects

2011-2019: "Computer design, synthesis and biological evaluation of novel heterocyclic compounds as selective inhibitors of tumorigenesis ", University of Belgrade-Faculty of Pharmacy, funded by Ministry of Education, Science and Technological development of Republic of Serbia

2006-2010: "Synthesis, quantitative relationships between structure, properties and activity, physico-chemical characterization and analysis of pharmacologically active substances ",

University of Belgrade-Faculty of Pharmacy, funded by Ministry of Education, Science and Technological Development of Republic of Serbia

2002-2005: "Molecular structures, chemical transformations, physico-chemical characterization, pharmaceutical purity and analysis of pharmacologically active substances", University of Belgrade-Faculty of Pharmacy, funded by Ministry of Education, Science and Technological Development of Republic of Serbia

2010-2011: "Quantitative structure-activity relationships, computational design and synthesis of pyridine derivatives as potential anticancer drugs", funded by Ministry of Higher Education, science and technology of Republic of Slovenia and Ministry of education, science and technological development of Republic of Serbia (leader)

2012-2013: "Computer-aided design of novel anticancer drugs - protein kinases inhibitors", funded by Federal Ministry for Education and Science of Bosnia and Herzegovina

2008-2009: "The development of quantitative structure-property models for prediction of pKa, solubility and resorption of drugs", funded by Federal Ministry of Education and Science of Bosnia and Herzegovina

2007-2008: "Investigation of structural and electronic properties of organic cations, anions and radicals", funded by Federal Ministry of Education and Science of Bosnia and Herzegovina

2007-2009: "Analysis of active substances in dietary supplements" funded by Ministry of Higher Education, Science and Technological Development of Republic of Slovenia and Ministry of Education, Science and Technological Development of Republic of Serbia

2003-2005: "Chromatographic methods in the analysis of pharmacologically active substances and quantitative structure-activity/property relationships of drugs", funded by Ministry of Higher Education, Science and Technological Development of Republic of Slovenia and Ministry of Education, Science and Technological Development of Republic of Serbia

Selected publications

1. 3D-QSAR study of adenosine 5'-phosphosulfate (APS) analogues as ligand for APS reductase; Eric Slavica, Cvijetic Ilija, Zloh Mire. *J Serb Chem Soc* 2021; 86: 561-570.

2. Structural Insights into Binding of Small Molecule Inhibitors to Enhancer of Zeste Homolog 2. Marko Kalinić, Mire Zloh, Slavica Erić. *J Comput Aid Mol Des* 2014; 28: 1109-1128.

3. Computational classification models for predicting the interaction of drugs with P-glycoprotein and Breast Cancer Resistance Protein. Slavica Erić, Marko Kalinić, Katarina Ilić, Mire Zloh. *SAR QSAR Environ Res* 2014; 25: 955-982.

4. Insights into mechanism of anticancer activity of pentacyclic oxindole alkaloids of *Uncaria tomentosa* by means of a computational reverse virtual screening and molecular docking approach. Pawel Kozielowicz, Mire Zloh, Katarzyna Paradowska, Slavica Erić, Iwona Wawer. *Monatshefte fur Chemie - Chemical Monthly* 2014; 145: 1201-1211.

5. Recent Progress in Fundamental Understanding and Practice of Chaotropic Chromatography Rationalizing the Effects of Analytes' Structure with Pharmaceutical Application (Review; Book chapter) Vemic Ana, Kalinic Marko, Colovic Jelena, Eric Slavica, Malenovic Andjelija. *Adv Chromatogr*, 2018; 54:1-41.

6. In silico design of small molecule inhibitors of CDK9 / cyclin T1 interaction. Jelena Randjelović, Slavica Erić, Vladimir Savić. *J Mol Graph Model* 2014; 50: 100-112.

7. Computational study and peptide inhibitors design for the CDK9 –cyclin T1 complex Jelena Randelović, Slavica Erić, Vladimir Savić. *J Mol Model* 2013; 19: 1711-1725.

8. Prediction of aqueous solubility of drug-like molecules using a novel algorithm for automatic adjustment of relative importance of descriptors implemented in counter-propagation artificial neural networks Erić Slavica, Kalinic Marko, Popovic Aleksandar, Zloh Mire, Kuzmanovski Igor. *Int J Pharm* 2012; 437: 232-

241.

9. Prediction of toxicity and data exploratory analysis of estrogen-active endocrine disruptors using counter propagation artificial neural networks. Nataša Stojić, Slavica Erić, Igor Kuzmanovski. *J Mol Graph Model* 2010; 29: 450-460.

10. Quantitative Structure-Activity Relationships of $\alpha 1$ Adrenergic Antagonists. Erić S, Solmajer T, Novic M, Oblak M, Agbaba D. *J Mol Model* 2004; 10: 139-150.