ZORICA VUJIC

Employment Information:

- 2012-to date, full professor, University of Belgrade-Faculty of Pharmacy
- 2007-2012, associate professor, University of Belgrade-Faculty of Pharmacy
- 2002-2007, assistant professor, University of Belgrade-Faculty of Pharmacy
- 1996-2002, teaching assistant, University of Belgrade-Faculty of Pharmacy
- 1990-1996, teaching associate, University of Belgrade-Faculty of Pharmacy
- 1987-1990, Pharmacist, Pharmacy "Kosmaj", Mladenovac

Education:

- 2014. Academic specialization, "Qualified pharmacist", University of Belgrade-Faculty of Pharmacy
- 2002. Medical specialization, "Drug Quality Control", University of Belgrade-Faculty of Pharmacy
- 2001. PhD, University of Belgrade- Faculty of Pharmacy
- 1996. Master of Science, University of Belgrade-Faculty of Pharmacy
- 1987. Graduated pharmacist, University of Belgrade-Faculty of Pharmacy

Training:

- 2003-2004: Postdoc studies, University of Illinois, Faculty of Pharmacy, Chicago (15 months);
- 1996: Study training, Charles University, Faculty of Medicine, Prague, Czech republic (3 months).

Academic awards and distinctions:

- Honorary member of Pharmaceutical Chamber of Serbia
- Scholarship of the Serbian Foundation for Support of Young Scientists and Artists

Teaching activities:

- Pharmaceutical Chemistry 3
- Pharmaceutical-medicinal chemistry
- Selected topics in pharmaceutical chemistry
- Mechanisms of degradation and source of impurities in phrmaceutical preparation
- The significance of G-protein coupled receptors: structure, function and pharmacological importance
- The chemical approach of *pro drug* design of pharmacologically active compounds
- Peptides and peptidomimetics
- Ion channels: structure, function and pharmacological importance

Mentor of four defended PhD thesis, ten specialization as well as over 15 undergraduate diplomas work, member of dozens of commissions for the defense of doctoral and specialist theses.

Textbooks:

- Zorica Vujic, Miralem Smajic, Jasmina Brboric, Nedžad Mulavdic, Introduction to drug chemistry, Rešro-Karić d.o.o. Tuzla, 2021, ISBN 978-9958-795-16-9
- Peer-reviewed script Selected chapters of Pharmaceutical Chemistry, University of Belgrade-Faculty of Pharmacy, 2012
- Zorica Vujic, Jasmina Brboric, Olivera Cudina, Slavica Eric, Branka Ivkovic, Katarina Vucicevic, Bojan Markovic. Handbook for practice of pharmaceutical chemistry, I and II part, publisher: Faculty of Pharmacy

I part 162 p. ISBN 86-80263-27-3

II part 171 p. ISBN 86-80263-28-1

• Zorica Vujic, Analytics of antidepressants (TLC, HPLC, CE), Foundation Andrejevic, Belgrade 2002, ISBN 86-7244-303-9

Activities within the Faculty:

- Head of Department of Pharmaceutical Chemistry, 2019-2021;
- Dean of the Faculty of Pharmacy, 2012-2018;
- Vice-dean for finance of Faculty of Pharmacy, 2009.-2012;
- President of the Expert Committee of the First and Second QP Conferences, 2013;
 2015;
- President of the Project Steering Committee "Quality of care indicators working party & scientific collaborator", 2013-2014;
- President of the Expert Committee of the IX and X Symposium of Pharmacists and Biochemists of the Republic of Srpska, 2007; 2008;
- Member of the Scientific Committee of the Congress of Pharmacists of Serbia with International Participation, 2006; 2010;
- President of the Student Enrollment Commission, President of the Disciplinary Committee of the Faculty of Pharmacy and member of the Disciplinary Commission of the University of Belgrade;
- Lecturer at 14 national and international seminars, conferences and continuing education courses.

Activities within wider Academic Community:

- Vice-Rector for Finance, University of Belgrade, 2021-to present;
- The president of Republic Expert Commission of Pharmacy, 2014-2018;
- The member of the Republic Expert Commission for Prevention and Control of Addiction Diseases, 2015-2018;
- Member of the Working Group of the Ministry of Health for Amendments to the Law on Medicines and Medical Devices, 2014;
- Member of the Commission for Precursors of the Ministry of Health, 2014;
- Expert of the Medicines and Medical Devices Agency of Serbia.

Projects:

National

- Science Fund of Republic of Serbia: Utilization of interplay between inflammation and cancer in the development of compounds with anticancer activity, 2021-2024;
- Innovation fund of Republic of Serbia: Development of a novel antiseptic/disinfectant based on the antimicrobial effect of new synthesis chalcone, 2020-2021;
- The Ministry of Education, Science and Technological Development of the Republic of Serbia (basic research): Development of molecules with anti-inflammatory and cardioprotective action: structural modifications, modeling, physico-chemical characteristics and formulation testing (172041), 2011-2018;
- The Ministry of Education, Science and Technological Development of the Republic of Serbia (technological development): Development of micro- and nanosystems as carriers for drugs with anti-inflammatory action and methods for their characterization (TR 34031), 2011-2018;
- The Ministry of Education, Science and Technological Development of the Republic of Serbia (basic research): Substances for pharmaceutical use: modeling, synthesis, physicochemical and biological properties, degree of purity and investigation of dosage forms, 2006-2010;
- The Ministry of Education, Science and Technological Development of the Republic of Serbia (basic research): Molecular structures, chemical transformations, physicochemical characterizations, pharmaceutical purity and analysis of pharmacologically active compounds, 2002-2005;
- The Ministry of Education, Science and Technological Development of the Republic of Serbia (basic research): Drug, physicochemical properties, stability and new methods in analytics, 1996-2001.

International

- COST project (CA15216): "European Network of Bioadhesion Expertise: Fundamental Knowledge to Inspire Advanced Bonding Technologies, 2017-2021;
- COST project "Simulation and pharmaceutical technologies for advanced patient-tailored inhaled medicines", 2015-2018;

- Tempus project "PQPharm Postgraduate Qualification in Pharmacy The Way Forward", 2010-2013;
- "Biomedical mass spectrometry", College of Pharmacy, University of Chicago, 2003-2004;
- "The role of membrane phospholipids in the active transport of serotonin and its inhibition by antidepressants "Faculty of Medicine, Charles University, Prague, Czech Republic, 1996.

Publications:

- 1. Jovanovic M, Turkovic N, Ivkovic B, **Vujic Z**, Nikolic K, Grubisic S. 3D-QSAR, molecular docking and in silico ADMET studies of propiophenone derivatives with anti-HIV-1 protease activity. 2021; early access **M22**
- 2. Jankovic T, Turkovic N, Kotur-Stevuljevic J, **Vujic Z**, Ivkovic B. Differences in antioxidant potential of chalcones in human serum: In vitro study. Chemico-Biological Interactions. 2020; 324:

 M21
- 3. Turkovic N, Ivkovic B, Kotur-Stevuljevic J, Tasic M, Markovic B, **Vujic Z.** Molecular Docking, Synthesis and anti-HIV-1 Protease Activity of Novel Chalcones. Current Pharmaceutical Design. 2020; 26 (8): 802-814

 M22
- 4. Dobricic V, Turkovic N, Ivkovic B, Csuvik O, **Vujic Z**. Evaluation of the lipophilicity of chalcones by RP-TLC and computational methods. JPC-Journal of Planar Chromatography-Modern TLC. 2020; 2020; 33(3): 245-253 **M23**
- 5. Smajić M, **Vujić Z**. Application of central composite design and structural analysis to the optimization of HPLC method for simultaneous analysis of hydrochlorothiazide, amlodipine besylate and valsartan. Main Group Chemistry. 2018; 17: 165-180 **M23**
- 6) Dobričić V, Savić J, Nikolić K, Vladimirov S, **Vujić Z**, Brborić J. Application of biopartitioning and QSRR modeling for prediction of gastrointestinal absorption and design of novel beta-hydroxy-beta-arylalkanoic acid. European Journal of Pharmaceutical Sciences. 2017; 100: 280-284

 M21
- 7) Crevar-Sakac M, **Vujic Z**, Vujcic Z, Markovic B Vasiljevic D. LC-MS/MS Method for Quantification of Atorvastatin, o-Hydroxyatorvastatin, p-Hydroxyatorvastatin, and Atorvastatin Lactone in Rat Plasma. Acta Chromatographica. 2016; 28(3): 281-298 **M23**
- 8) Pavlovic B, Cvijetic N, Dragacevic L, Ivkovic B, **Vujic Z**, Kuntic V. Direct UV Spectrophotometry and HPLC Determination of Triton X-100 in Split Virus Influenza Vaccine. Journal of AOAC International. 2016; 99(2): 396-400 **M22**

- 9) Milasinovic N, Calija B, Vidovic B, Crevar-Sakac M, <u>Vujic Z</u>, Knezevic-Jugovic Z. Sustained release of alpha-lipoic acid from chitosan microbeads synthetized by inverse emulsion method. Journal of the Taiwan Institute of Chemical Engineers. 2016; 60: 106-112

 M22
- 10) Smajic M, Nikolic K, **Vujic Z**, Ahmetovic L. Kuntic V. 3D-QSAR studies and pharmacophore identification of AT(1) receptor antagonists. Medicinial Chemistry Research. 2016; 25(1): 51-61 M23