

**NAME AND SURNAME:** Branka (Milisav) Ivković

**Employment Information:**

- **2019** Associate Professor at the Department of Pharmaceutical Chemistry, University of Belgrade - Faculty of Pharmacy
- **2015 - 2018** Visiting professor in the independent study program *Pharmacy of the University of Montenegro* in Podgorica.
- **2014** Assistant Professor at the Department of Pharmaceutical Chemistry, University of Belgrade - Faculty of Pharmacy
- **2003** .Assistant at the Department of Pharmaceutical Chemistry and Drug Analysis, University of Belgrade - Faculty of Pharmacy
- **1998** Intern Assistant at the Department of Pharmaceutical Chemistry and Drug Analytics, University of Belgrade - Faculty of Pharmacy
- **1996** Expert Associate at the Department of Pharmaceutical Chemistry and Drug Analysis, University of Belgrade - Faculty of Pharmacy

**Education:**

- **2013** Doctor of Science - Faculty of Pharmacy, University of Belgrade, defended her doctoral dissertation entitled "*Design, synthesis and biological activity of aminoalkoxy derivatives of phenylpropiofenone* " **on** March 20, 2013. at the Faculty of Pharmacy, University of Belgrade (mentor Prof. Dr. S. Vladimirov). Narrow scientific field: Pharmaceutical-medical chemistry and structural analysis
  - **2005** Enrolled in specialist studies in drug testing and control - Faculty of Pharmacy, University of Belgrade
  - **2002** Master of Science - Faculty of Pharmacy, University of Belgrade, defended her master's thesis entitled "*Application of different chiral selectors in the separation of enantiomers of metoprolol tartrate by planar chromatography and high performance liquid chromatography*" on July 11, 2002. at the Faculty of Pharmacy, University of Belgrade (mentor Prof. Dr. D. Radulović). Narrow scientific field: Pharmaceutical-medical chemistry and structural analysis
  - **1995** - Graduated Pharmacist - graduated from the Faculty of Pharmacy, University of Belgrade
  - **1990** - graduated from the Medical School in Sombor

**Training:**

- **October 2021.** Course of continuous education *Vaccines against infectious diseases - where are we today?* organized by the University of Belgrade - Faculty of Pharmacy
- **September 2017.** Course *GMP-good manufacturing practice* organized by the University of Belgrade - Faculty of Pharmacy.
- **April 2016.** Course "Tests of knowledge in measuring educational outcomes" organized by the University of Belgrade - Faculty of Pharmacy

- **November 2015** Course Ion Chromatography / Sample Preparation IC / SP organized by Thermo Fisher Scientific and Analysis doo Belgrade
- **May 2014.** " *DSCI / 500 STAR software V12.00*
- **June 2010.** *Transfer of analytical methods HPLC-UHPLC-UPLC* , Faculty of Pharmacy in Belgrade, organized by Analysis;
- **June 2007.** *Validation of Methods in Laboratory Practice*, Faculty of Technology and Metallurgy in Belgrade
- **October 2006** *Stability testing of pharmaceutical products* Vršac organized by the Hemofarm-Stad Concern, ALIMIS and the Serbian Chamber of Commerce Three-day course for conducting internal training of quality management systems according to the standard SRPS ISO 9001: 2008
- **1997.** Passed professional exam for pharmacists.

### Teaching activities:

Organization, preparation and performance of theoretical and practical classes within the integrated academic studies in compulsory subjects: *Pharmaceutical Chemistry I, Pharmaceutical Chemistry II Pharmaceutical Chemistry III and Pharmaceutical Chemistry.*

Conducting theoretical classes in doctoral studies; *module pharmaceutical chemistry* , teacher of *Mechanisms of degradation and biotransformation of biologically active compounds* .

### Teaching literature:

Prof. Dr. Slavica Erić, Prof. Dr. Jasmina Brborić, Doc Dr. Bojan Marković, Doc Dr. Branka Ivković: *Handbook for practical classes in Pharmaceutical Chemistry I, University of Belgrade, Faculty of Pharmacy, Belgrade, 2015.*

- *Manual for practical classes in Pharmaceutical Chemistry I* , Belgrade, 2004.
- *Manual for practical classes in Pharmaceutical Chemistry II*, Belgrade, 2004.

### Activities within the Faculty:

- **2021** Appointed coordinator and member of the Commission for postgraduate teaching - doctoral studies at the Faculty of Pharmacy

### Activities within the wider academic community:

- **2017** . member of COST action Multi-target paradigm for innovative ligand identification in the drug discovery progress (mutalig)
- **2009** . to this day he is a member of the Serbian Pharmacological Society
- **1997 - present** Member of the Association of Pharmaceutical Associations of Serbia

### Reviewer in journals of category M20

*European Journal of Medicinal Chemistry , Journal of Medicinal Chemistry , Journal of Chromatography A , Drug Research , Acta Chromatographia , Journal of Pharmacy and Bioallied Sciences , Medicinal chemistry , Pharmaceutics , Molecules, Journal of Molecular structure*

### **Projects:**

- **Project IDEAS, for the period 2022-2024, Utilization of interplay between inflammation and cancer in the development of compounds with anticancer activity ( *InfCanPlay* )** Faculty of Pharmacy in Belgrade (Ministry of Science and Technological Development, Republic of Serbia)
- **Project Proof of Concept Project, Fund for Innovation Activity, Republic of Serbia for the period 2020-2021. Development of a new antiseptic / disinfectant based on the antimicrobial effect of newly synthesized chalcones , (project 5617)** Innovation Fund (Ministry of Science and Technological Development, Republic of Serbia)
- **Project of the Ministry of Science, Education and Technological Development of the Republic of Serbia for the period 2011 and further Development of molecules with anti-inflammatory and cardioprotective effects: structural modifications, modeling, physico-chemical characteristics and formulation tests (OI172041), Faculty of Pharmacy , Republic of Serbia) and Development of new technologies for the production of red wines and dietary products rich in polyphenols and with cardioprotective effects "(TR 31020), Faculty of Medicine, (Ministry of Science, Education and Technological Development, Republic of Serbia)**
- **Project of the Ministry of Science and Technological Development of the Republic of Serbia for the period 2005 - 2010. Substances for pharmaceutical use: modeling, synthesis, physico-chemical and biological properties, degree of purity and testing of dosage forms, (project 142072)** Faculty of Pharmacy, (Ministry of Science and Technological Development) , Republic of Serbia), University of Belgrade - Faculty of Pharmacy
- **Project of the Ministry of Science and Technological Development of the Republic of Serbia for the period 2001-2005. Molecular structures, chemical transformations, physico-chemical characterization, pharmaceutical purity and analysis of pharmacologically active substances , Faculty of Pharmacy in Belgrade (Ministry of Science and Technological Development, Republic of Serbia)**

### **Selected publications:**

- Nikola Pešić, Aleksandra Dapčević, **Branka Ivković**, Kyriakos Kachrimanis, Miodrag Mitrić, Svetlana Ibrić, Djordje Medarević, Potential application of low molecular weight excipients for amorphization and dissolution enhancement of

carvedilol, *International Journal of Pharmaceutics*, Volume 608, 2021, <https://doi.org/10.1016/j.ijpharm.2021.121033>.

- Milan Jovanović · Nemanja Turković · **Branka Ivković** · Zorica Vujić · Katarina Nikolić · Sonja Grubišić, 3D-QSAR, molecular docking and in silico ADMET studies of propiophenone derivatives with anti-HIV-1 protease activity, *Structural Chemistry* (2021) 32:2341–2353, <https://doi.org/10.1007/s11224-021-01810-1>
- Ajdarić, J.; Ibrić, S.; Pavlović, A.; Ignjatović, L.; **Ivković, B.** Prediction of Drug Stability Using Deep Learning Approach: Case Study of Esomeprazole 40 mg Freeze-Dried Powder for Solution. *Pharmaceutics* **2021**, *13*, 829. <https://doi.org/10.3390/pharmaceutics13060829>
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- Dušan Ušjak, Miroslav Dinić, Katarina Novović, **Branka Ivković**, Nenad Filipović, Magdalena Stevanović, Marina T. Milenković, Methoxy-Substituted Hydroxychalcone Reduces Biofilm Production, Adhesion and Surface Motility of *Acinetobacter baumannii* by Inhibiting *ompA* Gene Expression, *Chem. Biodiversity* 2021, 18, <https://doi.org/10.1002/cbdv.202000786>
- Dobričić, V., Turković, N., **Ivković, B.** et al. Evaluation of the lipophilicity of chalcones by RP-TLC and computational methods. *JPC-J Planar Chromat* **33**, 245–253 (2020). <https://doi.org/10.1007/s00764-020-00029-w>
- Tamara Janković, Nemanja Turković, Jelena Kotur-Stevuljević, Zorica Vujić, **Branka Ivković**, Differences in antioxidant potential of chalcones in human serum: In vitro study, *Chemico-Biological Interactions*, Volume 324, 2020, <https://doi.org/10.1016/j.cbi.2020.109084>.
- Turkovic Nemanja, **Ivkovic Branka**, Kotur-Stevuljevic Jelena, Tasic Milica Marković Bojan, Vujić Zorica, “Molecular Docking, Synthesis and anti-HIV-1 Protease Activity of Novel Chalcones”, *Current Pharmaceutical Design* 2020; 26(8) <https://doi.org/10.2174/1381612826666200203125557>
- Gagic Z, **Ivkovic B**, Srdic-Rajic T, Vucicevic J, Nikolic K, Agbaba D. Synthesis of the vitamin E amino acid esters with an enhanced anticancer activity and in silico screening for new antineoplastic drugs. *Eur J Pharm Sci.* 2016 Jun; 88:59-69.
- Gagic Z, Nikolic K, **Ivkovic B**, Filipic S, Agbaba D. QSAR studies and design of new analogs of vitamin E with enhanced antiproliferative activity on MCF-7 breast cancer cells. *J Taiwan Inst Chem E.* 2016 Feb;59:33-44
- **Ivkovic Branka M** Nikolic Katarina M Ilic Bojana B Zizak Zeljko S Novakovic Radmila B Cudina Olivera A Vladimirov Sote M, Phenylpropiophenone derivatives as potential anticancer agents: Synthesis, biological evaluation and quantitative structure-activity relationship study, *European Journal Of Medicinal Chemistry*, (2013), vol. 63, 239-255