NAME AND SURNAME

JASMINA BRBORIĆ

Employment Information:

• **2014 –** present, Associate Professor at the Department of Pharmaceutical Chemistry, University of Belgrade - Faculty of Pharmacy (2019, re-election)

• **2008 - 2013** Assistant Professor in the independent study program Pharmacy of the University of Montenegro in Podgorica.

• **2009 – 2010** Assistant Professor at the Faculty of Pharmacy in Tuzla, BiH

• **2006 - 2013** Assistant Professor at the Department of Pharmaceutical Chemistry, University of Belgrade - Faculty of Pharmacy (2011, re-election).

• **1996 - 2005** Teaching Assistant at the Department of Pharmaceutical Chemistry and Drug Analysis, University of Belgrade - Faculty of Pharmacy

• **1989 - 1995** Assistant Trainee at the Department of Pharmaceutical Chemistry and Drug Analysis, University of Belgrade - Faculty of Pharmacy

• **1987 - 1988** Teaching Associate at the Department of Pharmaceutical Chemistry and Drug Analysis, University of Belgrade - Faculty of Pharmacy

Education:

• **2008** – Drug Testing and control specialist, Specialization of health workers and healthcare associates, University of Belgrade - Faculty of Pharmacy. Specialist paper entitled: "Testing the purity and stability of 2,4-diiodo-6-methylphenylcarbamoylmethyl iminodiacetic acid (DIODIDA), a ligand for ^{99m}Tc-complexes, using UV spectrophotometry, thin layer chromatography and liquid chromatography & ^{99m}Tc-Iminodiacetic acid derivatives – biological properties and application in nuclear medicine", defended on December 24, 2008 (mentor Prof. Sote Vladimirov).

• **2005** Doctor of Pharmaceutical Sciences - University of Belgrade - Faculty of Pharmacy. She defended her doctoral dissertation entitled: "Halogenated derivatives of iminodiacetic acid labeled with technetium-99m for hepatobiliary scintigraphy: design, synthesis, physicochemical and biological properties", mentors Prof. Dr. Sote Vladimirov and Mirjana Jovanovic, PhD, senior research associate, Vinca Institute of Nuclear Sciences); scientific field: Pharmaceutical-medicinal chemistry and structural analysis; Radiopharmacy

• **1995** Master of Science - University of Belgrade-Faculty of Pharmacy. She defended her master's thesis entitled: "Synthesis, physicochemical and biological properties of 2,4-diiodo-6-methyl-phenylcarbamoylmethyl iminodiacetic acid" on September 28, 1995 (mentor Prof. Dr. Sote Vladimirov); scientific field: Pharmaceutical-medical chemistry and structural analysis; Radiopharmacy

• **1987** – Bachelor of Pharmacy - Faculty of Pharmacy, University of Belgrade, with an average grade of 9.03/10.

• **1982** - Gymnasium in Smederevo, high school of natural and technical direction, technician for biochemistry and molecular biology.

Training:

• **December 2019** Education for improving the teacher competencies of teachers and associates: Building appropriate relationships with students and the rules of business communication, University of Belgrade-Faculty of Pharmacy
• **April 2016** Course "Knowledge tests in measuring educational outcomes" organized by the University of Belgrade - Faculty of Pharmacy
• **April 2016** Course "GMP - good manufacturing practice" organized by the University of Belgrade - Faculty of Pharmacy
• **February 2016** Course SRPS ISO 9001: 2008 Introduction to the standard, organized by the University of Belgrade - Faculty of Pharmacy
• **November 2015** Training for Lead Assessor for Laboratories (SRPS ISO / IEC 17025: 2006)
• **April 2015** Course SRPS ISO 9001: 2008 Introduction to the standard, organized by the University of Belgrade - Faculty of Pharmacy
• **September 2007** Workshop "New perspectives for fast HPLC using two micron packing material, broader pressure, flow and temperature range of analytical equipment on Agilent 1200RR system", organized by Agilent Technologies, DSP Chromatography, Ohrid, Republic of Macedonia, 26-30. September
• **2001-2005** - Laboratory for Radioisotopes, Vinca Institute of Nuclear Sciences, Serbia (researcher on the project "Research and development of radiopharmaceutical and others agents for medical applications", Vinca Institute of Nuclear Sciences
• **December 1988** Passed the professional exam for graduate pharmacists

Academic awards and distinctions:

• **2005** - Annual award of the Belgrade Chamber of Commerce for the best doctoral dissertations defended at the University of Belgrade 2004/05.
• **2014** - Second Prize in Student Poster Presentations at the 26th DIA Annual EuroMeeting 2014 in Vienna, Austria (thesis mentor).

Teaching activities:

From 1987 to 2005 she was involved in the preparation, conducting practical classes and realization of the practical part of the exam in the compulsory subject *Pharmaceutical Chemistry* (V and VI semesters of study).

Since 2006, she has been involved in conducting theoretical classes at: Integrated Academic Studies (IAS):

• **2017/18** – further, compulsory subject *Pharmaceutical Chemistry 2* (theoretical classes)
• **2007-2010** compulsory subject *Pharmaceutical Chemistry 2* (theoretical and practical classes)
• **2008-2019** compulsory subject *Pharmaceutical Chemistry* for Pharmacy-Medical biochemistry students (theoretical and practical classes)
• **2007-2017** compulsory subject *Pharmaceutical Chemistry 1* (theoretical and practical classes)
• **2008/09 -** further, elective course *Selected Chapters of Pharmaceutical Chemistry*

Postgraduate Studies:

• **2019-** so far, Doctoral studies (accreditation 2019), DAS, I year, elective course, *Mechanisms of degradation and biotransformation of biologically active compounds.*
• **2013-** so far, Doctoral studies − module Pharmaceutical Chemistry, *Mechanisms of degradation and origin of impurities in pharmaceuticals* (II year, III semester; compulsory

course); *Chemical approach to the prodrug design of pharmacologically active compounds* (II year, III semester; elective course); *Radiopharmaceutical Chemistry* (II year, III semester; elective course) and *Seminar 4* (III year, compulsory course)
• **2011-** so far, Specialist studies for health needs, Testing and control of drugs, the compulsory subject *Radiopharmacy*,
• **2016-** so far, Specialist studies for health needs, Testing and control of drugs, the compulsory subject *Pharmaceutical Chemistry*
• **2011-** so far, Specialist academic studies, Pharmacy 3, module Release of medical products on market, the compulsory subject *Pharmaceutical-Medical Chemistry* and in the elective subject *Radiopharmaceuticals.*

Jasmina Brborić was a mentor of one defended doctoral dissertation, 5 specialization at Testing and drug control, 9 final/graduate theses and 5 student papers presented at student congresses.

She was a member of the defense committee: one master's thesis at the Faculty of Pharmacy in Tuzla, University of Sarajevo, BiH, 3 specialist papers in Testing and drug control (Health specialization) and 2 specialist papers in Release of medical products on market (academic specialization), and 35 final/graduate theses.

Textbooks:

Jasmina Brborić is the co-author of a university textbook:

Z. Vujić, M. Smajić, J. Brborić, N. Mulavdić, Introduction to Drug Chemistry, Faculty of Pharmacy in Tuzla, 2021 (National and University Library of Bosnia and Herzegovina, Sarajevo - 204 pages). COBISS.BH-ID 44815366; ISBN 978-9958-795-16-9

She is the co-author of three auxiliary textbooks:

S. Erić, J. Brborić, B. Marković, B. Ivković, Manual for Practical Teaching in Pharmaceutical Chemistry I; University of Belgrade - Faculty of Pharmacy, 2015 (Belgrade: Colografx) - 169 p. (COBISS.SR-ID 217357324; ISBN 978-86-6273-024-4) Second edition 2018; Third edition 2021.

Z. Vujić, J. Brborić, O. Čudina, S. Erić, B. Ivković, K. Vučićević, B. Marković, Manual for practical teaching in Pharmaceutical Chemistry, Part I and II; Faculty of Pharmacy, University of Belgrade, (Science) Belgrade, 2004 Part I 162 p. ISBN 86-80263-27-3 Part II 171 p. ISBN 86-80263-28-1

Z. Vujić, J. Brborić, O. Čudina, S. Erić, B. Lučić Manual for practical teaching in Pharmaceutical chemistry, printed in three editions: the first in 2001, the second amended in 2003 and the third amended in 2004.

Activities within the Faculty:

• **2019 –** still, a member of the Commission for Postgraduate Teaching - Specialist studies
• **2017** – still, a member of the Committee organizing and applying procedures for *students*' assessment at the Faculty of Pharmacy
• **2013** - onwards – a member of the Committee for Publishing at the Faculty of Pharmacy (2013-2015; 2015-2018; 2018- and beyond)
• **2006-2013** a member of the Commission for Monitoring and Improving the Quality of Teaching at the Faculty of Pharmacy in Belgrade (2006-2009; 2010-2013)
• **2004-2007** Member of the Council of the Faculty of Pharmacy

• **2011**, a member of the commission for the implementation of student enrollment in the first year of integrated academic studies at the Faculty of Pharmacy, for the school year 2011/11
• **2011**, President of the Commission for the Annual Inventory of Funds for 2011.
• **2000** Member of the expert group for harmonization and processing of translated texts European Pharmacopoeia, Third Edition published 1996, for the preparation of the Yugoslav Pharmacopoeia 2000, fifth edition.

Activities within wider Academic Community:
• **2011** Lecturer at the course of continuous professional development "Diabetes treatment, molecular-chemical basis" held on May 21, 2011 in Belgrade, organized by the University of Belgrade - Faculty of Pharmacy. The title of the lecture is: "Oral antidiabetics - sulfonylurea derivatives and meglinides"
• **2011** and **2012**. Lecturer at the continuing professional development courses "Radioactive radiation and application of protection measures in case of an accident" held on November 22, 2011 and April 21, 2012 in Belgrade, organized by the University of Belgrade - Faculty of Pharmacy. The title of the lecture is: Radiopharmaceuticals and the use of radiation sources in medicine.
• **1987 –** still, a member of the Federation of Pharmaceutical Associations of Serbia (SFUS)
•Reviewer in journals of category M20: *Acta Chromatographica, Journal of Labelled Compounds and Radiopharmaceuticals*
•**2021** Reviewer of the university textbook *Pharmaceutical Chemistry 1 - Collection of problem tasks with solutions*, authors: Prof. dr Selma Špirtović-Halilović, prof. dr Elma Veljović, dr sci. Amar Osmanović and prof. Dr. Davorka Završnik, Faculty of Pharmacy in Sarajevo, University of Sarajevo, 2021.

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 of the Ministry of Science, Education and Technological Development of the Republic of Serbia for the period **2011-2019**: *Development of molecules with anti-inflammatory and cardioprotective activity: structural modifications, modeling, physico-chemical characteristics and formulation studies* (OI172041), Faculty of Pharmacy, Republic of Serbia)
• Project of the Ministry of Science, Education and Technological Development of the Republic of Serbia for the period **2011-** *Development of micro- and nanosystems as carriers for drugs with anti-inflammatory action and methods for their characterization* (TR 34031), Faculty of Pharmacy
• Project of the Ministry of Science and Technological Development of the Republic of Serbia for the period **2005-2010**. *Substances for pharmaceutical use: modeling, syntheses, physico-chemical and biological properties, degree of purity and testing of dosage forms*, (project 142072 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*, 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**. *Research and development of radiopharmaceutical and other agents for medical applications*, Vinca Institute of Nuclear Sciences, Serbia
• Project of the Ministry of Science of the Republic of Serbia for the period **1996-2001**. *Chemical transformations of biologically active compounds, quality control and metabolites*, University of Belgrade-Faculty of Pharmacy

From 1996, participate in projects of the Ministry of Science, Technology and Development of Serbia. She is a co-author of 28 scientific papers published in SCI indexed journals with impact factor (M20), 8 papers in national journals (M50) and 54 presentations at international and national scientific meetings.

According to SCOPUS, number of citation is 284 (without self-citations) and h-index is 8.

Selected publications:

1. Brboric J, Klisic A, Kotur-Stevuljevic J, Delogu G, Gjorgieva Ackova D, Kostic K, Dettori M.A, Fabbri D, Carta P, Saso L. Natural and natural-like polyphenol compounds: in vitro antioxidant activity and potential for therapeutic application. *Archives of Medical Science* https://doi.org/10.5114/aoms/135379

2. Rupar Jelena, Aleksić Mara, Dobričić Vladimir, Brborić Jasmina, Čudina Olivera: An electrochemical study of 9-chloroacridine redox behavior and its interaction with double-stranded DNA, *Bioelectrochemistry* 135(2020)107579 https://doi.org/10.1016/j.bioelechem.2020.107579

3. Dobričić V, Savić J, Nikolic K, Vladimirov S, Vujić Z, Brborić J: Application of biopartitioning micellar chromatography and QSRR modeling for prediction of gastrointestinal absorption and design of novel β-hydroxy-β-arylalkanoic acids. *European Journal of Pharmaceutical Sciences*, 100 (2017) 280-284. DOI: 10.1016/j.ejps.2017.01.023

4. Savić J, Dobričić V, Nikolic K, Vladimirov S, Dilber S, Brborić J: *In vitro* prediction of gastrointestinal absorption of novel β-hydroxy-β-arylalkanoic acids using PAMPA technique. *European Journal of Pharmaceutical Sciences* 100 (2017) 36-41. DOI: 10.1016/j.ejps.2017.01.005

5. Savić J, Dilber S, Milenković M, Kotur-Stevuljević J, Marković B, Vladimirov S, Brborić J: Docking studies, synthesis and biological evaluation of β-aryl-β-hydroxypropanoic acids for anti-inflammatory activity. *Medicinal Chemistry,* 13 (2) (2017) 186-195. DOI: 10.2174/1573406412666160907150247

6. Jasmina Brboric; Mirjana S Jovanovic; Sanja Vranješ-Đurić; Olivera Cudina; Bojan Markovic; Sote Vladimirov: The effect of lipophilicity on the hepatobiliary properties of iminodiacetic acid derivatives in the conditions of hyperbilirubinemia. *Appl. Radiat. Isotopes* 74 (2013) 31-35. DOI: 10.1016/j.apradiso.2012.12.014

7. J. Brborić, S. Vladimirov, M.S. Jovanović and N. Dogović: Synthesis of novel iodinated iminodiacetic acid analogues as hepatobiliary imaging agents. *Monats. Chem*. 135 (8) (2004) 1009-1014. DOI: 10.1007/s00706-004-0174-x

8. M.S. Jovanovic, J. Brboric, S. Vladimirov and Lj. Suturkova: The correlation between lipophilicity of the ligands and the hepatobiliary properties of the radiopharmaceuticals – approach to the development of new IDA derivatives. *J.Radioanal. Nucl. Ch* 245 (3) (2000) 555-560. DOI: 10.1023/a:1006709310527

9. M.S. Jovanovic, J. Brboric, S. Vladimirov, B. Zmbova, Lj. Vuksanovic, D. Živanov-Stakic and V. Obradovic: New ^{99m}Tc-diiodine substituted IDA derivative (DIIODIDA) for hepatobiliary imaging. *J.Radioanal. Nucl. Ch.* 240(1) (1999) 321-324. DOI: 10.1007/bf02349171

10. S. Vladimirov, J. Brborić, M. Švonja, D. Živanov-Stakić: Spectrophotometric determination of nizatidine in pharmaceutical formulations. *J. Pharm. Biomed. Anal.* 13 (1995) 933-936. DOI: 10.1016/0731-7085(95)01329-j