SANDRA CVIJIĆ

Employment Information:

Department of Pharmaceutical Technology and Cosmetology, University of Belgrade–Faculty of Pharmacy (2003 – …)

- Associate Professor (2017 – …)
- Assistant Professor (2012 – 2017)
- Assistant (2007 – 2012)
- Teaching Associate (2003 – 2007)

Education:

- 2015, Specialization in Pharmaceutical Technology, University of Belgrade–Faculty of Pharmacy (final paper entitled "*In silico* biopharmaceutical characterization tools in formulation development of oral dosage forms")
- 2011, PhD in Medical Sciences - Pharmacy, University of Belgrade–Faculty of Pharmacy (thesis entitled "Development of biorelevant dissolution media for poorly soluble drug substances"*)*
- 2005, State Exam
- 2003, BSc in Pharmacy (equivalent of MSc degree), University of Belgrade–Faculty of Pharmacy
- 1995, Gymnasium "Dušan Vasiljev", Kikinda

Training:

- 2020 – 2021, Series of webinars on GastroPlus® modeling
- 2019 June 17 – 20, Training school "In vitro tools for evaluating the intraluminal and absorption behavior of advanced drug formulations" within COST UNGAP Action CA16205, Odense, Denmark
- 2017 December 1, TRAIN program "Networking & Teamwork", Belgrade, Serbia
- 2017 November 23 – 24, TRAIN program "Communication and Presentation Skills", Belgrade, Serbia
- 2017 June 19 – 20, TRAIN program "Preparing Funding Applications & Project Management", Belgrade, Serbia
- 2017 June 16 – 17, TRAIN program "Entrepreneurial Skills", Belgrade, Serbia
- 2017 June 6 – 7, TRAIN program "Research Methodology, Scientific Writing and Result Presentation in technical, natural and life sciences", Belgrade, Serbia
- 2017 February 20 – 22, Course "Emerging Device and Particle Engineering Technologies for Optimal Pulmonary Drug Delivery" within SIMINHALE COST Action MP1404, Valletta, Malta

- 2016 October 18 – 19, Workshop “Pulmonary Drug Delivery: Computational Fluid Particle Dynamics and Emerging Functional Imaging Technologies” within SIMINHALE COST Action MP1404, Prague, Czech Republic
- 2016 April 2, Course “Testovi znanja u merenju obrazovnih ishoda“, Belgrade, Serbia
- 2014 October 15 – 17, 2nd LIAT-Ph Intensive Course "Drug product development and manufacture within the QbD concept", Belgrade, Serbia
- 2014 May 26 – 28, 1st LIAT-Ph Intensive Course "Bioprocessing Training Course", National Institute for Bioprocessing Research & Training (NIBRT), Dublin, Ireland
- 2014 May 12 – 16, Workshop "Hands-on Experience with Model-based drug development: Incorporating population variability into mechanistic prediction of PK and modelling PK-PD", Frankfurt, Germany
- 2012 November 24, Tempus PQPharm Advanced Dissolution Seminar, Belgrade, Serbia
- 2012 June11 – 12, Tempus PQPharm Workshop "Support Quality Enhancement in Learning, Teaching and Assessment", Belgrade, Serbia
- 2011 October 3 – 7, "Advanced GastroPlus™ Simulation and Modeling Workshop for Drug Absorption, Pharmacokinetics, and Pharmacodynamics", Mainz, Germany
- 2009 April 7 – 9, OYSTAR HÜTTLIN Training Course on the Use of Mycrolab for Tablet Coating, Granulation and Tastemasking Purposes, Skopje, Macedonia
- 2003 November 28 – 30, V Educative Seminar on Publishing in Biomedicine, Vršac, Serbia

Academic awards and distinctions:

- 2021, University of Belgrade – Faculty of Pharmacy, Letter of appreciation for the successful promotion of the Faculty and outstanding scientific-research results in 2021
- 2009, University of Belgrade – Faculty of Pharmacy, Annual Award for post–graduate students
- 2007, Award for the best poster presentation, Symposium "Biofarm 2007: *In Vitro* Dissolution Testing: Role in Biopharmaceutical Characterization of Drug Products", Belgrade, Serbia
- 2000 – 2001, Scholarship from the Fund for Supporting the Young of Serbia
- 2000, Scholarship from Royal Norway Embassy

Teaching activities:

- Development and delivery of undergraduate courses in Pharmaceutical Technology 2, Pharmaceutical Technology 3, Industrial Pharmacy, Veterinary Medicines and Dosage Forms for Paediatric Population (integrated academic studies)
- Development and delivery of postgraduate courses within doctoral studies in Pharmaceutical Technology (Literature review, Research and development of pharmaceutical forms, Advanced drug delivery systems, In silico - in vitro - in vivo methods in medicinal products/drug characterization)
- Development and delivery of postgraduate courses within specialization studies in Pharmaceutical Technology (Solid dosage forms, Biopharmaceutics, Cytotoxic drugs)
- Supervisor (36) and member of Defense Committees (53) - BPharm and MPharm dissertations
- Supervisor (2) and member of Defense Committees (2) - doctoral dissertations in Pharmaceutical Technology
- Supervisor (3) and Member of Defense Committee (8) - specialization (final papers) in Pharmaceutical Technology, Industrial Pharmacy, and Release of Medicinal Products on the Market

Textbooks:

- Vasiljević D, Krajišnik D, Grbić S, Đekić Lj. Farmaceutska tehnologija I Praktikum, 2009. Farmaceutski fakultet, Beograd.
- Krajišnik D, Grbić S, Petrović J, Đekić Lj, Vasiljević D, Kovačević A, Čalija B. Farmaceutska tehnologija II, Praktikum, 2010. Farmaceutski fakultet, Beograd.
- Vasiljević D, Krajišnik D, Grbić S, Đekić Lj. Farmaceutska tehnologija I Praktikum, izmenjeno i dopunjeno izdanje, 2012. Farmaceutski fakultet, Beograd.
- Krajišnik D, Grbić S, Petrović J, Đekić Lj, Vasiljević D, Kovačević A, Čalija B. Farmaceutska tehnologija II, Praktikum, izmenjeno i dopunjeno izdanje, 2013. Farmaceutski fakultet, Beograd
- Vasiljević D, Krajišnik D, Grbić S, Đekić Lj. Praktikum iz Farmaceutske tehnologije I, izmenjeno i dopunjeno izdanje, 2015. Farmaceutski fakultet, Beograd.
- Krajišnik D, Đekić Lj, Cvijić S, Vasiljević D. Praktikum iz Farmaceutske tehnologije 2, 2016. Univerzitet u Beogradu - Farmaceutski fakultet, Beograd.
- Đuriš J, Cvijić S, Aleksić I. Praktikum iz Farmaceutske tehnologije 3, 2017. Univerzitet u Beogradu - Farmaceutski fakultet, Beograd.
- Krajišnik D, Đekić Lj, Cvijić S, Vasiljević D. Priručnik za praktičnu nastavu iz Farmaceutske tehnologije 2, 2020. Univerzitet u Beogradu - Farmaceutski fakultet, Beograd.

- Đuriš J, Cvijić S, Aleksić I. Praktikum iz Farmaceutske tehnologije 3, 2021. Univerzitet u Beogradu - Farmaceutski fakultet, Beograd.
- Vasiljević D, Cvijić S, Aleksić I, Milovanović M. Veterinarski lekovi, 2021. Univerzitet u Beogradu - Farmaceutski fakultet, Beograd.
- Ibrić S, Đuriš J, Parojčić J, Aleksić I, Čalija B, Cvijić S. Industrijska farmacija, Univerzitet u Beogradu - Farmaceutski fakultet, Beograd (accepted for publication).

Activities within the Faculty:

- 2019 – ..., Member of the Programme Council of the Center for Continuous Education
- 2018 – ..., Member of the Committee for the preparation and realization of knowledge retention tests
- 2016 – ..., Member of the Postgraduate Studies Curriculum Committee
- 2009 – ..., Member of the Fourth Year Council (integrated academic studies)
- 2013 – …, Member of the Fifth Year Council (integrated academic studies)
- 2008 – 2021, Supervisor or co-supervisor of 26 student research projects within Centre for students' scientific research work (CNIRS)
- 2018, 2019, Organisation of BPSA Compounding Event

Activities within wider Academic Community:

- Member of the International Association for Pharmaceutical Technology (APV) and Pharmaceutical Association of Serbia (SFUS)
- Reviewer for scientific journals: Molecular Pharmaceutics, European Journal of Pharmaceutics and Biopharmaceutics, International Journal of Pharmaceutics, Journal of Controlled Release, Pharmaceutics, Arabian Journal of Chemistry, AAPS PharmSciTech, Drug Design, Development and Therapy, Asian Journal of Pharmaceutics, Hemijska industrija, Acta Pharmaceutica, Drug Development and Industrial Pharmacy, Drug Delivery Letters, Arhiv za farmaciju; Computational and Mathematical Methods in Medicine
- Guest editor of the Pharmaceutics Special Issue on Dry Powders for Inhalation: Formulation Design and Quality Assessment
- Review editor for Frontiers in Drug Delivery: Respiratory Delivery
- Member of the Organizing committee of the Central European Symposium on Pharmaceutical Technology (2016 September 22-24)

- Member of the Organizing committee of the 2nd Scientific Symposium of the Pharmaceutical Association of Serbia with International Participation: Pharmacy and the Nature - Complex Relations and Mutual Impacts (2021 October 28)
- Co-author of the online course Advanced Dissolution Testing

Projects:

- 2021 – 2023, "Design of inhaled nanomedicines for disease-centric therapy using an innovative experimental-modeling approach", Serbia – China bilateral project (Serbian principal investigator)
- 2020 – 2023, "Robust In Vitro/In Silico Model to Accelerate Generic Drug Product Development for the Oral Cavity Route of Administration", FDA funded project (grant No. 75F40120C00150)
- 2017 – 2022, UNGAP COST Action CA16205
- 2016 – 2019, SimInhale COST Action MP1404
- 2011 – 2016, "Advanced Technologies for Controlled Release from Solid Drug Delivery Systems" (TR 34007), national project funded by the Ministry of Education, Science and Technological Development, Republic of Serbia
- 2013 – 2015, Linking Industry and Academia in Teaching Pharmaceutical Development and Manufacture (LIAT-Ph), international project funded by EACEA through the Lifelong Learning Program
- 2013 – 2014, "Application of Machine Learning Tools in Establishing a Design Space in Solid Dosage Forms Development", Germany – Serbia bilateral project
- 2012 – 2013, "Optimization of Fluid Bed Hot Melt Granulation", Slovenia – Serbia bilateral project
- 2010 – 2013, Tempus PQPharm „Postgraduate Qualification in Pharmacy - The Way Forward“, international project funded by EACEA through the Tempus program
- 2008 – 2010, "Biopharmaceutical Characterization of the Selected BCS Class II and III Drugs: *In Vitro* and *In Silico* Methods Evaluation" (TR 23015), national project funded by the Ministry of Science and Technological Development, Republic of Serbia

Publications:

- Cvijic S. In Vitro/In Vivo Correlation for Transporters. In: Hock F., Gralinski M. (eds) Drug Discovery and Evaluation: Methods in Clinical Pharmacology. Springer International Publishing; 2019.
- Grbic S, Parojcic J, Djuric Z. Computer Aided Biopharmaceutical Characterization: Gastrointestinal Absorption Simulation. In: Djuris J, Ed. Computer-aided Applications in Pharmaceutical Technology. Cambridge: Woodhead Publishing Ltd.; 2013.
- Shi C, Ignjatovic J, Liu T, Han M, Cun D, Đuriš J, Yang M, Cvijić S. In vitro - in vivo - in silico approach in the development of inhaled drug products: nanocrystal-based formulations with budesonide as a model drug. AJPS 2021;16(3):350-362.
- Jovanović M, Tomić N, Cvijić S, Stojanović D, Ibrić S, Uskoković P. Mucoadhesive gelatin buccal films with propranolol hydrochloride: evaluation of mechanical, mucoadhesive, and biopharmaceutical properties. Pharmaceutics 2021;13(2):273.
- Đuranović M, Madžarević M, Ivković B, Ibrić S, Cvijić S. The evaluation of the effect of different superdisintegrants on the drug release from FDM 3D printed tablets through different applied strategies: In vitro-in silico assessment. Int J Pharm. 2021;610:121194.
- Kurcubic I, Cvijic S, Filipcev B, Ignjatovic J, Ibric S, Djuris J. Development of propranolol hydrochloride bilayer mucoadhesive buccal tablets supported by in silico physiologically-based modeling. React Funct Polym. 2020;151:104587.
- Markovic M, Zur M, Dahan A, Cvijić S. Biopharmaceutical characterization of rebamipide: the role of mucus binding in regional-dependent intestinal permeability. Eur J Pharm Sci. 2020;152:105440.
- Milanovic A, Aleksic I, Ibric S, Parojcic J, Cvijic S. Tableting of hot-melt coated paracetamol granules: Material tableting properties and quality characteristics of the obtained tablets. Eur J Pharm Sci. 2020;142:105121.
- Vulović A, Šušteršič T, Cvijić S, Ibrić S, Filipović N. Coupled in silico platform: Computational fluid dynamics (CFD) and physiologically-based pharmacokinetic (PBPK) modelling. Eur J Pharm Sci. 2018;113:171-84.
- Cvijić S, Parojčić J, Langguth P. Viscosity-mediated negative food effect on oral absorption of poorly-permeable drugs with an absorption window in the proximal intestine: In vitro experimental simulation and computational verification. Eur J Pharm Sci. 2014;61:40-53.