**NAME AND SURNAME: SAMIJA MURATOVIĆ**

***Professional experience***

* 2020 – present: Full professor

Department of Pharmaceutical chemistry, Faculty of pharmacy, University of Sarajevo

* 2015.- 2021.: Associate professor

Department of Pharmaceutical chemistry, Faculty of pharmacy, University of Sarajevo

* 2011.-2015.: Assistant professor

Department of Pharmaceutical chemistry, Faculty of pharmacy, University of Sarajevo

* 2006.-2011.: Senior Teaching Assistant - research fellow

Department of Pharmaceutical chemistry, Faculty of pharmacy, University of Sarajevo

* 1997.-2006.: Teaching Assistant – research fellow

Department of Pharmaceutical chemistry, Faculty of pharmacy, University of Sarajevo

* 1996.-1997.: Teaching Assistant – research fellow

Department of Pharmacognosy, Faculty of pharmacy, University of Sarajevo

***Education***

* **2006.** Specialist in Clinical pharmacy
* **2010.**PhD in Pharmaceutical Sciences

Thesis: “Design and synthesis of 4-hydroxycoumarin dimers with potential biological

activity” Faculty of Pharmacy, University of Sarajevo.

* **2006.**Master in Pharmaceutical Sciences

*Master's thesis:* „Synthesis of dimers and tetramers of 4-hydroxycoumarin and investigation of their biological activity" Faculty of Pharmacy, University of Sarajevo.

* **1996.**Master of Pharmacy

Faculty of Pharmacy, University of Sarajevo

***Teaching experience***  
***Integrated study of 1st and 2nd cycle of Faculty of Pharmacy, University of Sarajevo***

***Subjects:***

• Pharmaceutical Chemistry I

• Pharmaceutical Chemistry II

***Integrated study of 1st and 2nd cycle of Faculty of Pharmacy, University of Tuzla***

***Subjects:***

* Pharmaceutical Chemistry I,
* Pharmaceutical Chemistry II

***Elective courses:***

* Selected Chapters in Pharmaceutical Chemistry: New drugs in treatment of cardiovascular disease
* Selected Chapters in Pharmaceutical Chemistry: Drug Design,
* Selected Chapters in Pharmaceutical Chemistry: Drugs for the Treatment of Influenza and Cold
* Selected Chapters in Pharmaceutical Chemistry: Metabolic Drug Stability and Strategies for Increasing Metabolic Stability

***Doctoral Study*** ***at Faculty of Pharmacy, University of Sarajevo***

* Drug Research, Design and Development
* Application of QSAR and QSPR in Drug Design
* Molecular Basics of Pharmaceutical Chemistry

***Doctoral Study*** ***at Faculty of Pharmacy, University of Tuzla***

* Pharmacognosy-Phytochemical Modeling of Natural Medicinal Products

***Specijalization:***

* Mentor and co-mentor for Clinical pharmacy specializations

***Activities at the Faculty:***

* Head of the Department of Pharmaceutical Chemistry
* Member of the Scientific Committee of IV Pharmacist Congress BiH, Sarajevo, **2019.**
* Member of the Scientific Committee, Pharmaceutical and Medical Knowledge Showdown, Faculty of Pharmacy, University of Sarajevo, **2019,** Sarajevo, BiH
* Lecturer on the LLL program “School of the applicative phytotherapy” Faculty of Pharmacy, University of Sarajevo, **2018**. and **2019.**
* Member of the Technical Committee, 2nd Student Congress Food-Nutrition-Health, University of Sarajevo, **2017**. and **2018.**

***Projects:***

**2024-2025** Application of green chemistry in the profiling of active metabolites with antiviral activity from *Artemisia annua* L. from Bosnia and Herzegovina.  Participant in the scientific research project "

Federal Ministry of Education and Science.

**2018-2019** Phytochemical analyses of the triterpene saponins in the plant species belonging to the Lamiaceae family from Canton Sarajevo region and there possible use in pharmacy and medicine.

Ministry of Education, Science and Youth of Canton Sarajevo.

**2018-2019** Quantification of the essential oil in the aromatic plants and there economic significance from the point of view of cultivation in the Canton Sarajevo**.**

Ministry of Education, Science and Youth of Canton Sarajevo.

**2017-2018** Extraction, chemical characterization and antioxidative activity of essential oil,

flower, leaf and fruit of *Prinus spinosa* L. from Bosnia and Herzegovina.

Ministry of Education Science and Youth of Canton Sarajevo.

**2016 -2017** Investigation of antiproliferative, antioxidant and antimicrobial activity of synthesized tetraketone derivatives.

Federal Ministry of Education and Science, Bosnia and Herzegovina.

**2016 -2017** Investigation of the presence of flavonoids in native plant species from Canton Sarajevo region and there possible pharmacological activity**.**

Ministry of Education Science and Youth of Canton Sarajevo.

**2016-2017** Artificial neural network (ANN) and QSAR in design and synthesis pharmacological

active xanthenes.

Ministry of Education Science and Youth of Canton Sarajevo.

**2014 -2015** Modeling and docking studies of novel potent azomethine tymoquinone derivatives and their organometallic complexes.

Federal Ministry of Education and Science, Bosnia and Herzegovina.

**2013 -2014** Application of green chemistry in development and synthesis of biologically active

xanthenes and biscumarines.

Federal Ministry of Education and Science, Bosnia and Herzegovina.

**2013 -2014** New analogues of acyclic nucleosides-synthesis, structure, biological activity.

Federal Ministry of Education and Science, Bosnia and Herzegovina.

**2005-2006** Experimental and computer-based determination of lipophilicity of biologically active 4-hydroxycoumarin derivatives, 2005.

Federal Ministry of Education and Science, Bosnia and Herzegovina.

* 1. Investigations of stereoselective separation of the enantiomers of NSAID

drugs by use of biocatalysts.

Ministry of Education Science and Youth of Canton Sarajevo.

**2003 -2004** Synthesis and QSPR / QSAR study of coumarin derivatives.

Federal Ministry of Education and Science, Bosnia and Herzegovina.

***International projects:***

**2009-2012** Development of Acyclic Pyrimidine Analogues as PET-Tracer for Monitoring Gene Therapy. SCOPES International project,financed by Swiss National funds for the promotion of scientific research

***Selected publications (up to 10):***

1. Veljović E., Špirtović-Halilović S., **Muratović S.**, Osmanović A., Haverić S., Haverić A., Hadžić M., Salihović M., Malenica M., Šapčanin A. Završnik D.Antiproliferative and genotoxic potential of xanthen-3-one derivatives.*Acta Pharmaceutica***,** 2019;69: 69; 683–694
2. L. Applová, E. Veljović, **S. Muratović**, J. Karlíčková, K. Macáková, D. Završnik, L. Saso, K. Durić, P. Mladěnka. 9-(4'-dimethylaminophenyl)-2,6,7-trihydroxy-xanthene-3-one is a Potentially Novel Antiplatelet Drug which Antagonizes the Effect of Thromboxane A2. *Medicinal Chemistry,*  2018; 14: 1-10.
3. Veljović E., Špirtović-Halilović S., **Muratović S.**, Osmanović A., Haverić S., Haverić A., Hadžić M., Salihović M., Malenica M., Šapčanin A. Davorka Završnik.Antiproliferative and genotoxic potential of xanthen-3-one derivatives.*Acta Pharmaceutica*, 2019;69: 69; 683–694
4. Selma Zukić, Elma Veljović, Selma Špirtović-Halilović, **Samija Muratović**, Amar Osmanović, Snežana Trifunović, Irena Novaković, Davorka Završnik, Antioxidant, Antimicrobial and Antiproliferative Activities of Synthesized 2,2,5,5-Tetramethyl-9-aryl-3,4,5,6,7,9-hexahydro-1H-xanthene-1,8(2H)-dione Derivatives*, Croatica Chemica Acta****,*** 2018; 91(1):1-8
5. E. Veljović, S. Špirtović-Halilović, **S. Muratović,** A. Osmanović, S. Haverić, A. Haverić, M. Hadžić, M. Salihović, M. Malenica, A. Šapčanin, D. Završnik. Antiproliferative and genotoxic potential of xanthen-3-one derivatives. *Acta Pharmaceutica*, 2019; 69
6. **Samija Muratović,** Elma Veljović, Amar Osmanović, Haris Nikšić, Jasmina Đeđibegović, Hurija Džudžević Čančar, Davorka Završnik.Antiproliferative Evaluation and Docking Study of Synthesized Biscoumarin Derivatives. [CMBEBIH 2017](https://link.springer.com/book/10.1007/978-981-10-4166-2)**;**62 744-755.
7. **Muratović S.,** Osmanović A., Veljović E., Džudžević-Čančar H., Durić K.,Nikšić H., ZavršnikD. Evaluation of purity of some coumarin derivatives by measuring melting points, TLC and scanning densitometry. *Bulletin of the Chemists and Technologists of Bosnia and Herzegovina*, 2013;41:15-19.
8. **Muratović S.,** Durić K.,Veljović E., Osmanović A., Softić Dž., ZavršnikD.Synthesis of biscoumarin derivatives as antimicrobial agents. *Asian Journal of Pharmaceuticale and Clinical Research*,2013:6(3):131-134
9. Završnik D., **Muratović S.**, Makuc D., Plavec J., Cetina M., Nagl A., De Clercq E., Balzarini J., Mintas M. Benzylidene-bis-(4-Hydroxycoumarin) and Benzopyrano-Coumarin Derivatives: Synthesis, 1H/13C-NMRConfirmational and X-ray Crystal Structure Studies and *In Vitro* Antiviral Activity Evaluations. *Molecules*, 2011; 16: 6023-6040
10. Završnik D., **Muratović S.**, Špirtović S., Softić Dž., Medić-Šarić M. The synthesis and antimicrobial activity of some 4-hydroxycoumarin derivatives.*Bosn. J. Basic Med. Sci.* 2008;8 (3): 277-281.