**NAME AND SURNAME: ELMA VELJOVIĆ**

***Work experience***

* 2019 – present Associate professor

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

* 2016 – 2019 Assistant professor

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

* 2013 – 2016 Senior Teaching Assistant - research fellow

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

* 2007 – 2013 Teaching Assistant– research fellow

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

***Education***

* 2017 Specialization in Medical care

Consumpion Analysis of Antiepileptic drugs in Sarajevo Canton

* 2015 PhD in Pharmaceutical Sciences

thesis: Synthesis, structural characterization and biological activity of 9-aryl substituted xanthene derivatives– Faculty of Pharmacy, University of Sarajevo, Bosnia and Herzegovina

* 2013 Master in Pharmaceutical Sciences

thesis: *Synthesis, structural characterization and biological activity of xanthen-3-one derivatives* – Faculty of Pharmacy, University of Sarajevo, Bosnia and Herzegovina

* 2007 Master of Pharmacy

thesis: Synthesis and microbial activity of 4-arylaminocoumarins- Faculty of Pharmacy, University of Sarajevo, Bosnia and Herzegovina

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

Subjects:

• Pharmaceutical Chemistry I

• Pharmaceutical Chemistry II

***Elective courses:***

• Selected Topics in Pharmaceutical Chemistry: Drugs for the Treatment of Flu and Colds,

• Selected Topics in Pharmaceutical Chemistry: Metabolic Drug Stability and Strategies for Increasing Metabolic Drug Stability,

• Selected Topics in Pharmaceutical Chemistry: Drug Design

***Doctoral studies at the Faculty of Pharmacy, University of Sarajevo***:

• Drug research, design and development

• Medicines in space

• Application of QSAR and QSPR in drug design

***Specializations***

Specialization in Medicinal Care

***Projects***

2021-2022 Investigation of antiproliferative activity and toxicity of synthesized

xanthene derivatives

(Ministry of High Education Science and Youth of Canton Sarajevo)

2021-2022 Compounds from marine organisms: in silico screening for potential drug

against SARSCoV-2

(Ministry of High Education Science and Youth of Canton Sarajevo)

2017 – 2018 Chemical composition and antioxidant potential of edible wild mushrooms of Bosnia and Herzegovina

(Federal Ministry of Education and Science, Bosnia and Herzegovina)

2017 – 2018 Improvement of solubility and biological activity of 3-cinnamoyl-4-hydroxycoumarin derivatives by inclusion complexation with hydrophilic B-cyclodextrin derivatives

(Federal Ministry of Education and Science, Bosnia and Herzegovina)

2017 – 2018 The importance of determining the parameters of oxidative stress, inflammation and hemostasis in the early diagnosis of obesity in pediatric population

(Federal Ministry of Education and Science, Bosnia and Herzegovina)

2016 – 2017 Arteficial neural network (ANN) and QSAR in design and synthesis pharmacological active xanthenes

(Federal Ministry of Education and Science, Bosnia and Herzegovina)

2016 – 2017 Investigation of antiproliferative, antioxidant and antimicrobial activity of synthesized tetraketone derivatives  
(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)

2009 – 2012 Development of Acyclic Pyrimidine Analogues as PET-Tracer for Monitoring Gene Therapy

(SCOPES)

***Selected Publications:***

1. Mladenka P., Karlíčková J., Hrubša M., **Veljović E**., Muratović S., Carazo A., Shivling Mali A., Špirtović-Halilović S., Saso L., Pour M.and Durić K. Interaction of 2,6,7-Trihydroxy-Xanthene-3-Ones with Iron and Copper, and Biological Effect of the Most Active Derivative on Breast Cancer Cells and Erythrocytes. *Appl. Sci*. 2020, 10, 4846; doi:10.3390/app10144846
2. Zukić S., Oljacic S.,Nikolic K., **Veljović E**., Špirtović-Halilović S., Osmanović A. And Završnik D. Quantitative structure–activity relationships of xanthen-3-one and xanthen-1,8-dione derivatives and design of new compounds with enhanced antiproliferative activity on HeLa cervical cancer cells. JOURNAL OF BIOMOLECULAR STRUCTURE AND DYNAMICS. DOI: 10.1080/07391102.2020.1775125. [https://doi.org/10.1080/07391102.2020.1775125 2020](https://doi.org/10.1080/07391102.2020.1775125%202020)
3. Selma Špirtović-Halilović, **Elma Veljović**, Mirsada Salihović, Amar Osmanović, Aida Šapčanin, Dženita Softić, Sunčica Roca, Snežana Trifunović, Nihada Škrijelj, Selma Škrbo, Aida Selmanagić, Davorka Završnik. Synthesis, Microbiological Activity and In Silico Investigation for Some Synthesized Coumarin Derivatives. Croatica Chemica Acta. 93 (1); 2020
4. 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.
5. S. Zukić, **E. Veljović**, S. Špirtović-Halilović, S. Muratović, A. Osmanović, S. Trifunović, I. Novaković, D. 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.
6. **Veljović E**., Špirtović-Halilović S., Muratović S., Salihović M., Novaković I., Osmanović A., Završnik D. Antimicrobial Activity and Docking Study of Synthesized Xanthen-3-on Derivatives*.* *Research Journal of Pharmaceutical, Biological and Chemical Sciencies,* 2018; 9 (5):777-783.
7. U. Glamočlija, S. Padhye, S. Špirtović-Halilović, A. Osmanović, **E. Veljović**, S. Roca, I. Novaković, B. Mandić, I. Turel, J. Kljun, S. Trifunović, E. Kahrović, S. Kraljević Pavelić, A. Harej, M. Klobučar and D. Završnik. Synthesis, Biological Evaluation and Docking Studies of Benzoxazoles Derived from Thymoquinone. *Molecules,* 2018; 23: 3297
8. **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
9. S. Špirtović-Halilović, M. Salihović, S. Trifunović, S. Roca, **E. Veljović**, A. Osmanović, M. Vinković, D. Završnik. Density functional theory: 1H and 13C-NMR spectra of some coumarin derivatives. *Journal of Serbian Chemistry Society.* 2014, 79(11): 1405-1411
10. **E. Veljović**, S. Špirtović-Halilović, S. Muratović, L. Valek Žulj, S. Roca, S. Trifunović, A. Osmanović, D. Završnik. 9-Aryl Substituted Hydroxylated Xanthen-3-ones: Synthesis, Structure and Antioxidant Potency Evaluation. *Croatica Chemica Acta*, 2015, 88: 121