**Name and surname: AMAR OSMANOVIĆ**

**Work experience:**

* 2021 – present

**Assistant Professor**

University of Sarajevo, Faculty of Pharmacy

Department of Pharmaceutical Chemistry

* 2016 – 2021

**Senior Teaching and Research Assistant**

University of Sarajevo, Faculty of Pharmacy

Department of Pharmaceutical Chemistry

* 2012 – 2016

**Teaching and Research Assistant**

University of Sarajevo, Faculty of Pharmacy

Department of Pharmaceutical Chemistry

**Education:**

* 2020

**PhD in Pharmaceutical Chemistry: “Synthesis and investigation of biological activities of 5-alkyl pyrimidine derivatives”**

University of Sarajevo, Faculty of Pharmacy

* 2014

**TRAIN (*Training & Research for Academic Newcomers)***

University of Sarajevo

* 2014

**State qualifying exam for Masters of Pharmacy**

Federal Ministry of Health, Bosnia and Herzegovina

* 2011

**Master of Pharmacy**

University of Sarajevo, Faculty of Pharmacy

**Academic/teaching work:**

Integrated study of Ist and 2nd Cycle at Faculty of Pharmacy, University of Sarajevo

Obligatory subjects:

* *Pharmaceutical Chemistry I*
* *Pharmaceutical Chemistry II*

Elective subject:

* *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*

**Study visits abroad**

* October 2021. – January 2022.

Post-doctoral research: “Synthesis of photoswitchable derivatives of cholesterol as optoregulators of TRPC3/6-channels”.

Depertament of Medicinal Chemistry - Institute for Chemistry, University of Graz.

* February 2020.

Short Term Scientific Mission (STSM): “Molecular docking study of effects of 4-methylumbelliferone and structurally similar molecules on hyaluronan synthesis“.

Faculty of Chemistry and Chemical Technology, University of Ljubljana.

* December 2019.

Training School: “Basics of data modelling application to permeability studies and *in vitro in vivo* correlations“.

Faculty of Pharmacy, University of Lisbon.

* June 2012.

Synthesis of *N*-acyclic pyrimidine nucleoside analogs.

Faculty of Chemical Engineering and Technology, University of Zagreb.

**Projects:**

* Compounds from marine organisms: *in silico* screening in search for potential drug against SARS CoV-2.

Ministry of Science, Higher Education and Youth of Sarajevo Canton. Bosnia and Herzegovina, 2021 - 2022.

* Investigation of antitumor activity and toxicity of synthesized xanthenes.

Ministry of Science, Higher Education and Youth of Sarajevo Canton. Bosnia and Herzegovina, 2021 - 2022.

* Improvement of solubility and biological activity of 3-cinnamoyl-4-hydroxycoumarin derivatives by inclusion complexation with hydrophilic β-cyclodextrin derivatives.

Federal ministry of education and science. Bosnia and Herzegovina, 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.

* Investigation of antitumor, antioxidant and microbiological effects of synthesized tetraketone derivatives.

Cantonal Ministry of Education and Science. Bosnia and Herzegovina, 2016 - 2017.

* Neural networks and QSAR in the design and synthesis of pharmacologically active xanthenes.

Federal ministry of education and science. Bosnia and Herzegovina, 2016 - 2017.

* Modelling and docking studies of new potent azomethine thymoquinone derivatives and their organometallic complexes.

Federal ministry of education and science. Bosnia and Herzegovina, 2014 - 2015.

* New analogues of acyclic nucleosides – synthesis, structure and biological activity.

Federal ministry of education and science. Bosnia and Herzegovina, 2013 - 2014.

* Application of green chemistry in development and synthesis of biologically active xanthenes and biscoumarins.

Federal ministry of education and science. Bosnia and Herzegovina, 2013 - 2014.

* Development of novel C-5 fluoroalkyl *N*-acyclic pyrimidine nucleoside analogs as PET tracer for *in situ* monitoring of gene and cell-based therapies using HSV1-TK as a reporter gene.

International project SCOPES, 2009 - 2012.

**Selected publications:**

* M. Memišević, A. Zahirović, A. Višnjevac, **A. Osmanović**, D. Žilić, M. Kralj, S. Muratović, I. Martin-Kleiner, D. Završnik, E. Kahrović. Copper(II) Salicylideneimine Complexes Revisited: From a Novel Derivative and Extended Characterization of Two Homologues to Interaction with BSA and Antiproliferative Activity. *Inorganica Chimica Acta* 2021, 525: 120460.
* S. Špirtović-Halilović, E. Veljović, M. Salihović, **A. Osmanović**, A. Šapčanin, Dž. Softić, S. Roca, S. Trifunović, N. Škrijelj, S. Škrbo, A. Selmanagić, D. Završnik. Synthesis, Microbiological Activity and *In Silico* Investigation for Some Synthesized Coumarin Derivatives. *Croatica Chemica Acta* 2020, 93(1): 23-31.
* S. Zukić, S. Oljacic, K. Nikolic, E. Veljović, S. Špirtović-Halilović, **A. Osmanović**, D. Završnik. 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* 2020, DOI: 10.1080/07391102.2020.1775125.
* 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: 683-694.
* **A. Osmanović**, M. Salihović, N. Kopjar, D. Želježić, S. Roca, S. Špirtović-Halilović, A. Šapčanin, D. Završnik. Synthesis of New Acyclic Pyrimidine Nucleoside Analogues and Preliminary of Their Cytotoxic and Genotoxic Effects *In Vitro*. *Research journal of pharmaceutical, biological and chemical sciences* 2019, 10(1): 493-502.
* 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, D. Završnik. Synthesis, Biological Evaluation and Docking Studies of Benzoxazoles Derived from Thymoquinone. *Molecules* 2018, 23(12): 3297-3314.
* 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): 1-9.
* 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(2): 121-127.
* M. Salihović, **A. Osmanović**, S. Špirtović-Halilović, S. Roca, A. Meščić, Lj. Vujisić, S. Trifunović, D. Završnik, E. Sofić. Synthesis, structural, conformational and DFT studies of N-3 and O-4 alkylated regioisomers of 5-(hydroxypropyl) pyrimidine. *Journal of Molecular Structure* 2015, 1091: 170-176.
* M. Salihović, Š. Huseinović, S. Špirtović-Halilović, **A. Osmanović**, A. Dedić, Z. Ašimović, D. Završnik. DFT Study and Biological Activity of Some Methylxanthines. *Bulletin of the Chemists and Technologists of Bosnia and Herzegovina* 2014, 42: 31-36.
* S. Muratović, K. Durić, E. Veljović, **A.** **Osmanović**, Dž. Softić, D. Završnik. Synthesis of biscoumarin derivatives as antimicrobial agents. *Asian Journal of Pharmaceutical and Clinical Research* 2013, 6(3): 132-134.
* A. Meščić, S. Krištafor, I. Novaković, **A.** **Osmanović**, U. Müller, D. Završnik, S. M. Ametamey, L. Scapozza, S. Raić-Malić. C-5 Hydroxyethyl and Hydroxypropyl Acyclonucleosides as Substrates for Thymidine Kinase of Herpes Simplex Virus Type 1 (HSV-1 TK): Syntheses and Biological Evaluation. *Molecules* 2013, 18: 5104-5124.
* A. Meščić, D. Glavač, **A.** **Osmanović**, D. Završnik, M. Cetina, D. Makuc, J. Plavec, S. M. Ametamey, S. Raić-Malić. N-alkylated and O-alkylated regioisomers of 5-(hydroxyalkyl)pyrimidines: Synthesis and structural study. *Journal of Molecular Structure* 2013, 1039: 160-166.