

PERSONAL INFORMATION Alisa Selović

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EMPLOYMENT

University of Sarajevo - Faculty of Science

Department of Chemistry, Division of Analytical Chemistry

Zmaja od Bosne 35, 71 000 Sarajevo, Bonia and Herzegovina

Room: 136/I

Assistant Professor in the field of Analytical chemistry

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WORK EXPERIENCE

2018 – present	Assistant professor in the field of Analytical chemistry at the Department of
	chemistry of the Faculty of Science, University of Sarajevo, Bosnia and
	Herzegovina
2011–2018	Senior teaching assistant in the field of Analytical chemistry at the Department of chemistry of the Faculty of Science, University of Sarajevo, Bosnia and Herzegovina
2005-2011	Teaching assistant in the field of Analytical chemistry at the Department of chemistry of the Faculty of Science, University of Sarajevo, Bosnia and Herzegovina
2004-2005	Student assistant at the Department of chemistry of the Faculty of Science, University of Sarajevo, Bosnia and Herzegovina

EDUCATION

PhD in Chemistry, Faculty of Science, University of Sarajevo

2011–2018 Doctoral dissertation: "Remediation of shooting range soil contaminated with Ba,

Cr and Pb by chemical and biological methods"

Master of chemical sciences, Faculty of Science, University of Sarajevo

2007–2011 Master thesis: "Validation and measurement uncertainty of determination of heavy

metals from a shooting range soil using the AAS method after firing small-caliber

ammunition"

Graduated chemical engineer, Faculty of Science, University of Sarajevo

2000-2004 Diploma thesis: "Determination of metals in animal liver by AAS-flame

technique"

PERSONAL SKILLS

Native language	Bosnian					
Foreign languages	UNDERSTANDING		SPEAKING		WRITING	
	Listening	Reading	Spoken interaction	Spoken production		
English	B2	B2	B2	B2	B2	

Participation in projects

Project title Application of indicators in the assessment of the state of water courses in the canton of sarajevo

and bioremedia as a perspective protection solution

Project holder Prof. dr. Renata Bešta-Gajević

Involvement Collaborator

Financier Ministry of Science, Higher Education and Youth of Sarajevo Canton

Duration 2022-2023

Project title Increasing the degree of accumulation of heavy metals in selected hyperaccumulator plant species

using the priming method

Project holder Prof. dr Erna Karalija

Involvement Collaborator

Financier
Ministry of Science, Higher Education and Youth of Sarajevo Canton

Duration Duration

2019-2021



Project title Preparation of project proposals for Horizon 2020 from the program. ERC - Strating grant

Project holder Prof. dr Erna Karalija

Involvement Collaborator

Financier Ministry of Civil Affairs of Bosnia and Herzegovina

Duration 2020-2021

Project title Development of batch method for removal of heavy metals from aqueous solutions using

lignocellulose waste-based biosorbents

Project holder Prof. dr Mustafa Memić

Involvement Collaborator

Financier Federal Ministry of Education and Science

Duration 2018-2020

Project title TEMPUS - NETREL project: Network for education and training for public environmental

laboratories

Project holder Prof dr. Tid

Involvement Prof.dr. Tidža Muhić-Šarac

Collaborator

Financier EU European Community

Duration 2012-2016

Project title INTERREG-CARDS/PHARE – Adriatic New Neighbourhood Programme – «SIMCA No.38»,

Prof.dr. Tidža Muhić-Šarac

Project holder Faculty of Science of the University of Sarajevo as a partner to the Department of Environmental

Chemistry, University of Venice, Italy

Involvement Young researcher

Financier

Duration EU European Community

2007-2009

Memberships Bosnian National TrainMiC - European Commission; Joint Research Centre, IRMM -

Institute for reference materials and measurement, Geel, Belgija, member of the

organizing committee

Member of the Technical Committee BAS TC7 of the Institute for Standardization of

BiH in the field of environment

Member of the Organizing committee of the International congress of chemists and

technologists of Bosnia and Herzegovina

Member of the Society of chemists and technologists of the Sarajevo Canton

Member of the ethics committee at the Faculty of Science, University of Sarajevo

Awards and recognitions

Award for scientific work of the academic and scientific research staff of the University of Sarajevo for 2019 year

Seminars and educational gatherings

Effective Researcher and Pedagogic Starification in Academics, University of Sarajevo, Faculty of Science, Sarajevo (2021)

Determination of the content of pesticides and pharmaceuticals in surface waters using the HPLC-DAD method, TEMPUS-NETREL (Network for education and training for public environmental laboratories) project, University of Sarajevo, Faculty of Science, Sarajevo (2016)

International training in metrology in chemistry "Principles and applications of metrology in chemistry", University of Sarajevo, Faculty of Science, Department of Chemistry, Institute of Metrology and European Commission Joint Research Centre, IRMM – Institute for Reference Materials and Measurements, Belgium, Sarajevo, Bosnia and Herzegovina (2013)

International training in metrology in chemistry "Principles and applications of metrology in chemistry", University of Sarajevo, Faculty of Science, Department of Chemistry, Institute of Metrology and European Commission Joint Research Centre, IRMM – Institute for Reference Materials and Measurements, Belgium, Sarajevo, Bosnia and Herzegovina (2012)

International training in metrology in chemistry "Principles and applications of metrology in chemistry", University of Sarajevo, Faculty of Science, Department of Chemistry, Institute of Metrology and European Commission Joint Research Centre, IRMM – Institute for Reference Materials and Measurements, Belgium, Sarajevo, Bosnia and Herzegovina (2011)

International training in metrology in chemistry "Principles and applications of metrology in chemistry", University of Sarajevo, Faculty of Science, Department of Chemistry, Institute of Metrology and European Commission Joint Research Centre, IRMM – Institute for Reference Materials and Measurements, Belgium, Sarajevo, Bosnia and Herzegovina (2010)

International training in metrology in chemistry "Principles and applications of metrology in chemistry", University of Sarajevo, Faculty of Science, Department of Chemistry, Institute of Metrology and European Commission Joint Research Centre, IRMM – Institute for Reference Materials and Measurements, Belgium, Sarajevo, Bosnia and Herzegovina (2009)



International training in metrology in chemistry "TrainMiC convention" Celje, Slovenija (2009)

International training in metrology in chemistry "Principles and applications of metrology in chemistry", University of Sarajevo, Faculty of Science, Department of Chemistry, Institute of Metrology and European Commission Joint Research Centre, IRMM – Institute for Reference Materials and Measurements, Belgium, Sarajevo, Bosnia and Herzegovina (2008)

Quality in South East Europe: Obstacles and opportunities, European Commission, Joint Researces Centre-IRMM, Radovljica, Slovenia (2008)

International training in metrology in chemistry "TrainMiC training of New Trainer" by IRMM - Institute for Reference Materials and Measurements, Maribor, Slovenija (2007)

International training in metrology in chemistry "Principles and applications of metrology in chemistry", IRMM - Institute for Reference Materials and Measurements, Belgium, with the SENARC (Slovenian European natural Sciences research Centre), Maribor, Slovenija (2007)

International training in metrology in chemistry "Principles and applications of metrology in chemistry", University of Sarajevo, Faculty of Science, Department of Chemistry, Institute of Metrology and European Commission Joint Research Centre, IRMM – Institute for Reference Materials and Measurements, Belgium, Sarajevo, Bosnia and Herzegovina (2006)

Scientific papers Šehović, E., Memić, M., Sulejmanović, J., Hameed, M., Begić, S., Ljubijankić, N., Selović, A., Ghfar, A.A. and Sher, F. (2022). Thermodynamic valorisation of lignocellulosic biomass green sorbents for toxic pollutants removal. Chemosphere, 307, p.135737.

> Karalija, E., Selović, A., Bešta-Gajević, R. and Šamec, D. (2022). Thinking for the future: Phytoextraction of cadmium using primed plants for sustainable soil clean-up. Physiologia Plantarum, 174(4), p.e13739.

> Subašić, M., Šamec, D., Selović, A., Karalija, E. (2022). Phytoremediation of Cadmium Polluted Soils: Current Status and Approaches for Enhancing. Soil Systems, 6(1):3.

- Gradaščević, N., **Selović**, **A.**, Mujić, N., Smječanin, N., Karaman, N. and Nuhanović, M. (2022). Study of radionuclides and heavy metal migration through soil profiles (0–60 cm) at points near the targets of NATO strikes in 1995: environmental monitoring and assessment. *Environmental Monitoring and Assessment*, 194(8), pp.1-15.
- Ismičić-Tanjo, Dž., Huremović, J., **Selović, A.** and Šehović, E. (2021). Human Health Risk Assessment of Mercury in Soil–Plants System. *International Journal of Environmental Research*, 15(5), pp.797-805
- Pilić, S., Kalić, E., **Selović, A.** (2021) The content of essential and toxic metals in the hair of children with autistic spectrum disorders, *Bulletin of the Chemists and Technologists of Bosnia and Herzegovina*, 56, 13-21.
- Sulejmanović J., Jurković J., Ajanović T., **Selović A.**, Nuhanović M., Ajanović A., Kovo K., Durić L., Botonjić M. (**2021**) Extractability of sodium ions from soil, *Bulletin of the Chemists and Technologists of Bosnia and Herzegovina* 58, 7-18.
- Karalija, E., **Selović**, **A.**, Dahija, S., Demir, A., Samardžić, J., Vrobel, O., Čavar Zeljković, S. and Parić, A. (2021). Use of seed priming to improve Cd accumulation and tolerance in Silene sendtneri, novel Cd hyper-accumulator. *Ecotoxicology and Environmental Safety*, 210: 111882
- Ibrahimović, E., Pugonja, E., Trako, N., Huremović, J., **Selović, A.**, Sulejmanović, J. Omanović, R. (2021) Heavy metal contamination of street dust of Canton Sarajevo, Bosnia and Herzegovina health risk assessment, *Human and Ecological Risk Assessment: An International Journal*, 28(1), 100-113
- Šabanović, E., Memić, M., Sulejmanović, J., **Selović, A.** (2020) Simultaneous adsorption of heavy metals from water by novel lemon-peel based biomaterial, *Polish Journal of Chemical Technology*, 22(1), 46-53.
- Karalija, E. and **Selović**, **A.** (2018). The effect of hydro and proline seed priming on growth, proline and sugar content, and antioxidant activity of maize under cadmium stress. *Environmental Science and Pollution Research*, 25(33), 33370-33380.
- Huremović, J., Muhić-Šarac, T., Memić, M., Žero, S., **Selović, A.** (2015) Multielement and rare earth element composition of soil and lichen from Sarajevo, Bosnia and Herzegovina, *Ekoloji*, 24, 95, 1-9. (*Web of science: Science Citation Index Expanded, Impact factor: 0.84 za 2015*)
- Sulejmanović, J., Memić, M., Huremović, J., **Selović, A.** (2015) Simultaneous preconcentration and determination of Co(II), Cr(III), Fe(III), Mn(II), Ni(II) and Pb(II) by FAAS using silica gel modified with niobium(V) oxide, Chemical Science Review and Letters, 4(14), 662-670. (*CAS*, *DOAJ*)
- Huremović, J., Braha, B., Muhić-Šarac, T., **Selović, A.,** Memić, M. **(2014)** Sadržaj teških metala u začinskom bilju s tržišta u Sarajevu, Bosna i Hercegovina, *Kemija u industriji*, 63 (3-4), 77–81. (*Analytical Abstracts*,



Chemical Abstracts, EBSCO host, SCOPUS, DOAJ)

De Pieri, S., Arruti A., Huremović J., Sulejmanović, J., Selović, A., Đorđević, D., Fernández-Olmo, I., Gambaro, A. (2014) PAHs in the urban air of Sarajevo: levels, sources, day/night variation, and human inhalation risk, *Environmental Monitoring and Assessment*, 186, 1409-1419. (Web of Science Core Collection: Science Citation Index Expanded, Impact Factor: 1.592 za 2014, Q2)

Sulejmanović, J., Muhić-Šarac, T., Memić, M., Gambaro, A., Selović, A. (2014) Trace metal concentrations in size-fractionated urban atmospheric particles of Sarajevo, Bosnia and Herzegovina, *International Journal of Environmental Research*, 8(3), 711-718. (Web of Science Core Collection: Science Citation Index Expanded, Impact Factor: 1.105 za 2014, Q2)

Kurtagić, H., Memić, M., **Selović, A.** (2013) Effect of particle size on the dissolution of glibenclamide. *International Journal of Pharmacy and Pharmaceutical Sciences*, 5, 775-779. (EBSCO, CAS)

Bećiragić, S., Huremović, J., Muhić-Šarac, T., Memić, M., Selović, A., Žero, S. (2013) Metal levels in surface soils after different extraction procedures, *Bulletin of the Chemists and Technologists of Bosnia and Herzegovina*, 41, 1-5. (*Chemical Abstracts*)

Velispahić, A., Huremović, J., **Selović A.,** Sulejmanović, J. (**2012-2013**) Određivanje sadržaja kroma u biljnom materijalu, *Radovi - Hrvatsko društvo za znanost i umjetnost*, XIV-XV, 200-206. (*CAB PUBLISHING-UK*)

Delić, E., Huremović, J., Sulejmanović, J., **Selović A.** (2012-2013) Određivanje teških metala u udžbeničkoj hartiji, *Radovi - Hrvatsko društvo za znanost i umjetnost*, XIV-XV, 222-226. (CAB PUBLISHING-UK)

Šehbajraktarević, E., Huremović, J., **Selović, A.,** Šehbajraktarević K. (2011) Sezonske varijacije teških metala u oborinama na području Kantona Sarajevo, *Kemija u industriji*, 61 (1) 1–7. (*Analytical Abstracts, Chemical Abstracts, EBSCO host, SCOPUS, DOAJ*)

Memić, M., **Selović, A**. and Sulejmanović, J. **(2011)** Antifungalna aktivnost odabranih policikličnih aromatičnih ugljovodonika prema ligninolitičkim gljivama. *Hemijska industrija*, 65(5), pp.575-581. (*Journal Citation Reports - Thompson Reuters*, SCOPUS)

Memić, M., Selović, A. and Mahmutović, O. (2011) Toxicity of chlorinated phenols against ligninolytic fungi *Hypoxylon Fragiforme* and *Coniophora Puteana*. Works of the Faculty of Forestry University of Sarajevo, (2). (CAB Abstracts, EBSCO)

Poster and oral presentations

Masleša, A., Sulejmanović, J., Šehović, E., Begić, S., Sher, F. and **Selović. A.** (2022) Biosorption removal study of Methylene blue dye from aqueous solution on a Citrus limon peel, 4th International Congress of Chemists and Chemical Engineers of Bosnia and Herzegovina, Sarajevo, 30.06-02.07, Knjiga sažetaka, PP-ENC-04, p.104.

Subašić, M., Šamec, D., **Selović, A.** and Karalija, E. (2021). Phytoremediation of cadmium polluted soils. 1st International conference "Food & Climate Change", 15-16. October, Koprivnica, Croatia.

Konjević, I, **Selović, A.**, Sulejmanović, J., Ostojić, J. (2019) Ultrasound-assisted extraction of heavy metals from different particle size fractions of soil, 7th Conference of the Young Chemistrs of Serbia, Beograd, Serbia, 02.11., Knjiga sažetaka, CA PP 18

Kevilj-Olovčić, A., Memić, M., **Selović**, **A**. (**2016**) Verification of standard method BAS ISO 7890-3:2002: Water quality – determination of nitrates, 2nd International congress of chemists and chemical engineers of Bosnia and Herzegovina, 21.-23. October, Sarajevo, BiH. Bulletin of the Chemists and Technologists of Bosnia and Herzegovina, special issue, p.43.

Brković, M., Memić, M., **Selović, A.** (**2016**) Verification and application of standard method, BAS EN26777:2000 for determination of nitrites in domestic water, 2nd International congress of chemists and chemical engineers of Bosnia and Herzegovina, 21.-23. October, Sarajevo, BiH. Bulletin of the Chemists and Technologists of Bosnia and Herzegovina, Special Issue, p.48.

Olovčić, A., Memić, M., **Selović**, A. (2014) Content of Fe, Cu and Pb in human teeth enamel and dentin in relation to the age, Congress of chemists and chemical engineers of Bosnia and Herzegovina with international participation, Sarajevo, BiH, 10.-12. October, Bulletin of the Chemists and Technologists of Bosnia and Herzegovina, Special Issue OP-13. (oral presentation)

De Pieri, S., Arruti, A., Huremovic, J., Sulejmanovic, J., Muhic-Sarac, T., Memic, M., Selovic, A., Đorđević, D., Fernández-Olmo, I., Gambaro, A. and Barbante, C. (2012) PAHs in Sarajevo city gas phase distribution in night and day samples source recognition and human inhalation risk, XXIII Congresso Nazionale della Divisione di Chimica Analitica, Societa Chimica Italiana, Isola d'Elba (16.-20.9.), poster prezentacija, Book of abstracts, P126.

Huremović, J., Gambaro, A., Muhić-Šarac, T., Radaelly, M., Memić, M., Stortini, A.M., Selović, A., Smajić, J., Pieri, S.D. (2009) PM-10 and heavy metals in particulate matter of Sarajevo town, Bosnia and Herzegovina, 5th BioMAP, 5th International Workshop on Biomonitoring of Air pollution, Buenos Aires, Argentina, poster prezentacija, Book of Abstracts BM09048.

Muhić-Šarac, T., Sulejmanović J., Huremović, J., **Selović, A.,** Memić, M. (**2009**) Heavy metals in particulate matter of Sarajevo town, Bosnia and Herzegovina, 2nd



Symposium of chemistry and environment, Bar, Montenegro, poster prezentacija, PS1109, Book of Abstracts, 128.

Kavšek, D., **Selović**, **A.,** Muhić-Šarac, T., Brodnjak Vončina, D. (**2009**) Določevanje težkih kovin v pesku po streljanju z malokalibarsko municijo, Slovenski kemijski dnevi, 24.-25.9., Maribor, Slovenija. Zbornik referata Slovenskog kemijskog društva, 101.

Muhić-Šarac, T., Robović, A., Memić, M., Džudžević-Čančar, H., **Selović, A.** (2007) Validation of spectrophotometric methods for determination of phosphorus in fertilizer, 2nd Academic summer school on education in metrology in chemistry, Krakov, Poland, 23.-26.6.

Boloban, A., Muhić-Šarac, T., Memić, M. (**2005**) Detection of metals in animal liver by atomic absorption spectrometry, 12th Young Investigators', Seminar on analytical chemistry, YISAC 2005, Sarajevo, 5.-10.7., p.38