

# Mina Popovic

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## EDUCATION

<b>2009.</b>	M.Sc.Eng and BS, Department of Biochemical Engineering and Biotechnology, Faculty of Technology and Metallurgy, University of Belgrade, Serbia
<b>2015.</b>	PhD in Life Sciences, PhD School of Science and Technologies for Health Products, Department of Life Sciences, University of Modena and Reggio Emilia, Modena, Italy

## EMPLOYMENT HISTORY

<b>2023–present</b>	<b>Associate Professor, Senior Research Associate</b>	Faculty of Ecology and Environmental Protection Union – Nikola Tesla University
<b>2022–2023</b>	<b>Senior Research Associate</b>	University of Belgrade, Institute of Chemistry, Technology and Metallurgy (ICTM), Department of Ecology and Techno-Economics
<b>2018–2022</b>	<b>Research Associate</b>	University of Belgrade, Institute of Chemistry, Technology and Metallurgy (ICTM), Department of Ecology and Techno-Economics
<b>2017–2018</b>	<b>Research Associate</b>	Institute of Virology, Vaccines and Sera, TORLAK Belgrade, Serbia
<b>2014 – 2015</b>	<b>Research Assistant</b>	Research Assistant in the laboratory of Professor Dr. Maddalena Rossi, supervised by tutor Dr. Alberto Amaretti during PhD studies at University of Modena and Reggio Emilia, Modena, Italy
<b>2013 – 2014</b>	<b>Visiting Researcher Assistant</b>	Visiting Researcher Assistant in the laboratory of Professor Dr. David A Mills, supervised by Dr. Zachery Lewis, Institute Robert Mondavi,

		Departments of Food Science and Technology at the University of California, UC Davis, CA, USA
<b>2012 – 2013</b>	<b>Research Assistant</b>	Research Assistant in the laboratory of Professor Dr. Maddalena Rossi, supervised by tutor Dr. Alberto Amaretti during PhD studies at University of Modena and Reggio Emilia, Modena, Italy
<b>2010 – 2011</b>	<b>Researcher</b>	Researcher at University of Belgrade, Faculty of Technology and Metallurgy, Department of Biotechnology and Biochemical Engineering

<b>PROFESSIONAL EXPERIENCE</b>	
<b>2023 current</b>	- Microbial isolation of lactic acid bacteria species and <i>Lactobacillus</i> from different sources (gastrointestinal tract of <i>Cyprinus carpio</i> ) Detection metabolites from bacterial cell on HPLC, biodegradation of microplastics particles, biofermentation in continues system – bioreactor
<b>2018-2023</b>	Microbial isolation of <i>Lactobacillus</i> from (mice feces, extraction of exopolysaccharides (EPS) and biosorption studies, removal pollutions from contaminated water) HPLC/GC, AAS, Bradford protein assay, SDS-PAGE electrophoresis, Western blot, Elisa, FTIR, SEM, XRD
<b>2017 - 2018</b>	Microbial isolation of <i>Lactobacillus</i> from (mice feces, extraction of exopolysaccharides (EPS))
<b>2012-2015</b>	Microbial isolation of <i>Lactobacillus</i> and <i>Bifidobacterium</i> species from different sources (infant feces, human feces, murine feces, artisanal fermented sausages and hams, industrial sliced cooked ham) Characterization and identification of these strains using: MALDI – TOF – MS biotyper, RAPD-PCR, species-specific PCR, i 16S rRNA gene sequencing, Bifidobacterial-specific Terminal Restriction Fragment Length Polymorphisms (Bif-TRFLP), microencapsulation with different biomaterials HPLC/GC, AAS, Bradford protein assay, SDS-PAGE electrophoresis, Western blot, Elisa, FTIR, SEM, XRD

<b>MEMBERSHIPS</b>	
<b>2019 current</b>	– Serbian Biochemical Society (member of Federation of European Biochemical Societies - FEBS)
<b>2022 current</b>	– Serbian Society for Microbiology - Federation of European Microbial Societies (FEMS)

## RESEARCH PROJECTS

2018-2020

**176018** - "Geological and ecotoxicological research in the identification of geopathogenic zones of toxic elements in drinking water reservoirs, research on methods and procedures for reducing the impact of biogeochemical anomalies", Dr. Milka Vidović, Institute of Chemistry, Technology and Metallurgy, University of Belgrade, Principal investigator (PI)

## SELECTED PUBLICATIONS

Ljubic, V., Perendija, J., Cvetkovic, S. et al. Removal of Ni<sup>2+</sup> ions from Contaminated Water by New Exopolysaccharide Extracted from *K. oxytoca* J7 as Biosorbent. *J Polym Environ* 32, 1105–1121 (2024). <https://doi.org/10.1007/s10924-023-03031-5>

Jovana Perendija, Verica Ljubić, Mina Popović, Dragana Milošević, Zorana Arsenijević, Mihal Đuriš, Sabina Kovač, Slobodan Cvetković, Assessment of waste hop (*Humulus Lupulus*) stems as a biosorbent for the removal of malachite green, methylene blue, and crystal violet from aqueous solution in batch and fixed-bed column systems: Biosorption process and mechanism, *Journal of Molecular Liquids*, Volume 394, 2024, 123770, ISSN 0167-7322, <https://doi.org/10.1016/j.molliq.2023.123770>

Bojan Janković, Nebojša Manić, Mina Popović, Slobodan Cvetković, Željko Dželetović, Dragoslava Stojiljković Kinetic and thermodynamic compensation phenomena in C3 and C4 energy crops pyrolysis: Implications on reaction mechanisms and product distributions, *Industrial Crops & Products* 194 (2023) 116275, <https://doi.org/10.1016/j.indcrop.2023.116275>

Nebojša Manić, Bojan Janković, Dragoslava Stojiljković, Mina Popović, Slobodan Cvetković, Hrvoje Mikulčić, Thermodynamic study on energy crops thermochemical conversion to increase the efficiency of energy production, *Thermochimica Acta* 719 (2023) 179408, <https://doi.org/10.1016/j.tca.2022.179408>

A Life Cycle Energy Assessment for Biogas as Energy Carrier, Cvetkovic S.M., Popovic M., Novakovic J.D.G., Kijevcanin M.L. (2023) A Sustainable Green Future: Perspectives on Energy, Economy, Industry, Cities and Environment, , pp. 595-612

Verica Ljubic, Milena Milosevic, Slobodan Cvetkovic, Marijana Stojanovic, Katarina Novovic, Miroslav Dinic, and **Mina Popovic**, The new exopolysaccharide produced by a probiotic strain *L. reuteri* B2: Extraction, biological properties, and possible application for Ni<sup>2+</sup> ions removal from the contaminated water, *Biomass Conversion and Biorefinery*, **167** (2022) <https://doi.org/10.1007/s13399-022-03292-5>

Mina Popović, Zlate S. Veličković, Jovica Bogdanov, Aleksandar D. Marinković, Mariano Casas Luna, Isaak Trajković, Nina Obradović, Vladimir Pavlović, "Removal of the As(V) and Cr(VI) from the water using magnetite/3D-printed wollastonite hybrid adsorbent", *Science of Sintering*, (54) 2022, 1, 105-124, <https://doi.org/10.2298/SOS2201105P>

Mina Popović, Marijana Stojanović, Zlate Veličković, Ana Kovačević, Radmila Miljković, Nemanja Mirković, Aleksandar Marinković, Characterization of potential probiotic strain, *L. reuteri* B2, and its microencapsulation using alginate-based biopolymers, *International Journal*

of Biological Macromolecules, 183 (2021) 423–434, <a href="https://doi.org/10.1016/j.ijbiomac.2021.04.177">https://doi.org/10.1016/j.ijbiomac.2021.04.177</a>
Aleksandar D. Marinković, Marija M. Vuksanović, Nataša Karić, Veljko Đokić, Mina Popović, Radmila Jančić Heinemann, Nataša Z. Tomić, The effect of natural modifiers for starch hydrophobization on the performance of composite based on ethylene acrylic acid copolymer, <i>Polymer Composites</i> , 42, 3, 2021, Pages 1325-1337, <a href="https://doi.org/10.1002/pc.25903">https://doi.org/10.1002/pc.25903</a>
Quartieri A, Simone M, Gozzoli C, Popovic M, D'Auria G, Amaretti A, Raimondi S, Rossi M. Comparison of culture-dependent and independent approaches to characterize fecal bifidobacteria and lactobacilli. <i>Anaerobe</i> . 2016 Apr;38:130-137. doi: 10.1016/j.anaerobe.2015.10.006. Epub 2015 Oct 19. PMID: 26481833.
Lewis ZT, Shani G, Masarweh CF, Popovic M, Frese SA, Sela DA, Underwood MA, Mills DA. Validating bifidobacterial species and subspecies identity in commercial probiotic products. <i>Pediatr Res</i> . 2016 Mar;79(3):445-52. doi: 10.1038/pr.2015.244. Epub 2015 Nov 16. PMID: 26571226; PMCID: PMC4916961.
Lewis, Z.T., Totten, S.M., Smilowitz, J.T. <i>et al.</i> Maternal fucosyltransferase 2 status affects the gut bifidobacterial communities of breastfed infants. <i>Microbiome</i> <b>3</b> , 13 (2015). <a href="https://doi.org/10.1186/s40168-015-0071-z">https://doi.org/10.1186/s40168-015-0071-z</a>
Raimondi S, Popovic M, Amaretti A, Di Gioia D, Rossi M. Anti-Listeria starters: in vitro selection and production plant evaluation. <i>J Food Prot</i> . 2014 May;77(5):837-42. doi: 10.4315/0362-028X.JFP-13-297. PMID: 24780342.

<b>OTHER</b>	
<b>Language skills</b>	Native language – Serbian A1 (beginner) – French, Spanish A2 (elementary) B1 (pre-intermediate) B2 (post-intermediate) C1 (advanced) <b>C2 (full professional proficiency) – English, Italian</b>
<b>Awards and recognitions:</b>	<b>2014</b> Conference prize Student Travel Award IMGCC, Aarhus, Denmark. <b>2013</b> Grant to visit UC Davis, Davis, CA, USA, as visiting PhD student <b>2012</b> Full Fellowship for PhD studies, 3 years, at University of Modena and Reggio Emilia, Modena, Italy

