

Ljiljana Nikolić Bujanović

Professor

Faculty of Ecology and Environmental Protection

Union – Nikola Tesla University
Cara Dušana 62–64
Belgrade, Serbia

e-mail: ljnikolicbujanovic@unionnikolatesla.edu.rs
tel: +381 63 468 128

EDUCATION

2012.	PhD in Technical Sciences, Environmental Protection Engineering University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia
1990.	MSc of Technical Sciences, University of Belgrade, Department of Physical and Electrochemistry, Faculty of Technology - Metallurgy, Belgrade, Serbia
1985.	BSc Engineer- technologist University of Belgrade, Department of Physical and Electrochemistry, Faculty of Technology - Metallurgy, Belgrade, Serbia

EMPLOYMENT HISTORY

2022.	Senior research associate	Institute of Chemistry, Technology and Metallurgy, University of Belgrade, Serbia
2019.	Professor	Union – Nikola Tesla University Faculty of Ecology and Environmental Protection, Belgrade, Serbia
2016.	Associate Professor	Union – Nikola Tesla University, Faculty of Ecology and Environmental Protection, Belgrade, Serbia
2014.	Research associate	Institute of Chemistry, Technology and Metallurgy, University of Belgrade, Serbia
1995.	Research assistant	Institute of Chemistry, Technology and Metallurgy, University of Belgrade, Serbia

PROFESSIONAL EXPERIENCE	
2019.-	Professor, Union – Nikola Tesla University, Faculty of Ecology and Environmental Protection, Belgrade, Serbia
2016.-2019.	Associate Professor with 1/3 of the working time, Union – Nikola Tesla University, Faculty of Ecology and Environmental Protection, Belgrade, Serbia
1994. – 2019.	Researcher, scientific associate, participant and manager of scientific projects Research and Development Center IHIS Techno-experts d.o.o., Belgrade
1986. – 1994.	Independent designer of chemical technologies, Development Service "Krušik-Akumulatori", Valjevo, Serbia

MEMBERSHIPS	
2016.	Member of the committee for standardization KS N021 - cells and batteries at the Republic Institute for Standardization of the RS

RESEARCH PROJECTS	
2023.-2024.	Greening the Balkan HEIs Innovation and Entrepreneurial Potential (DeepGreenInno), član tima, EIT HEI Initiative , Horizon Europe, EU.
2021.-2025.	Plastics monitoring detection Remediation recovery (PRIORITY), član tima, COST CA20101
2022.-2023.	Obloge za tretman inficiranih rana na bazi hidrogelova ekološki prihvatljivih za životnu sredinu, član tima, Univerzitet „Union – Nikola Tesla“ Beograd, Srbija
2021.-2022.	Dugoročne i sezonske varijacije koncentracija glavnih zagađujućih supstanci u vazduhu na odabranim stanicama za praćenje kvaliteta vazduha u Srbiji, član tima, Univerzitet „Union – Nikola Tesla“ Beograd, Srbija
2011.-2019.	TR 34025: „Razvoj ekoloških postupaka tretmana štetnih materija primenom ferata(VI) i elektrohemijske oksidacije ili redukcije, član tima i rukovodilac projekta od 2017, Ministarstva za nauku i tehnološki razvoj, RSrbija
2011.-2019.	TR 31080: „Biodiverzitet kao potencijal u ekoremedijacionim tehnologijama oštećenih ekosistema“, član tima, Ministarstva za nauku i tehnološki razvoj, RSrbija
2017.-2018.	Razvoj recepture obloge i osvajanje proizvodnje elektrode za zavarivanje sa atestom, član tima, Ministarstva za nauku i tehnološki razvoj, RSrbija
2013.-2014.	Inovacioni pr. Br. 451-03-2802/2013-16/182,: Razvoj postupka i uređaja za uklanjanje arsena i organskih materija iz sirove vode za piće primenom ferata(VI), rukovodilac projekta, Ministarstva za nauku i tehnološki razvoj,

	RSrbija
2012.-2013.	IP-2012-16/19, "Spregnuto solarno-biogasno postrojenje za potrebe povećanja tehničko-tehnoloških performansi anaerobne prerade stajnjaka" realizovan u toku.
2008.-2010.	TP 19029 „Razvoj elektrohemijskog postupka proizvodnje ferata FeO_4^{2-} , FeO_4^{3-} snažnih ekološki bezbednih oksidacionih agenasa“, član tima, Ministarstva za nauku i tehnološki razvoj, RSrbija
2008.-2010.	TP 19061 „Istraživanje optimalnog sastava metalnih komponenti i niskomolekularnih hidrofobnih jedinjenja za razvoj novog metalurškog kvaliteta punjene žice za zavarivanje čelika namenjenih za rad na niskim temperaturama“, Ministarstva za nauku i tehnološki razvoj, RSrbija
2007.-2008.	I. 451-01-02960/2006-44/01 „Modifikovane legure Pb-Ag-Ca za elektrodne rešetke u olovnim akumulatorima i anode u hidrometalurgiji, član tima, Ministarstva za nauku i tehnološki razvoj, RSrbija
2005.-2007.	TP 006756 „Razvoj i istraživanje optimalne kalibracije čelične trake, sastava punila i tehnološkog postupka izrade punjene žice za zavarivanje“, član tima, Ministarstva za nauku i tehnološki razvoj, RSrbija.
2001.-2004.	TP MHT.2.07.0260.B „Novi materijali za primenu u proizvodnji elektrohemijskih izvora energije“, član tima, Ministarstva za nauku i tehnološki razvoj, RSrbija
1999.-2000.	S.2.06.17.0015 „Istraživanje i razvoj novih alkalnih akumulatora na bazi fulerena i specijalnih legura“, član tima, Ministarstva za nauku i tehnološki razvoj, RSrbija
1998.-1999.	I.2.1873 „Razvoj i usvajanje proizvodnje stacionarnog olovokiselog blok akumulatora bez održavanja“, član tima, Ministarstva za nauku i tehnološki razvoj, RSrbija
1996.-1997.	P.2.0502 „Razvoj industrijske tehnologije proizvodnje nikal-kadmijum akumulatora sa sinterovanim elektrodama (mokri postupak), član tima, Ministarstva za nauku i tehnološki razvoj, RSrbija

AWARDS	
2009.	Gold medal: Association of Inventors of Serbia Business Base 2009 for Electrochemical synthesis of ferrate solution suitable for water treatment.
2011.	Bronze medal: Association of Inventors of Serbia Invention Belgrade - 2011 for the Flow Electrolyzer for the production of an aqueous solution of ferrate(VI) suitable for the treatment of water of different origins.

SELECTED PUBLICATIONS

Nikolić Bujanović LJ (2023) Removal of pollutants from water in the function of sustainable development In: Ilić P, Govedar Z, Pržulj N (eds) Environment. Academy of Sciences and Arts of the Republic of Srpska, Banja Luka, Monograph LV:97–131УДК 502.131.1:504.05/.06

Ljiljana Nikolić Bujanović (2020), Ferat(VI): Sinteza i primena, Monografija, IHIS Techno experts, Beograd,. ISBN - 978-86-89775-03-7

Ana Ćirišan, Zorica Podračanin, **Ljiljana Nikolić Bujanović**, Sanja Mrazovac Kurilić & Predrag Ilić (2023), Trend Analysis Application on Near Surface SO₂ Concentration Data from 2010 to 2020 in Serbia, *Water, Air, & Soil Pollution* volume 234, Article number: 186

Vuckovic Biljana S Markovic Smiljana M Stevic Snezana Mrazovac-Kurilic Sanja M **Nikolic-Bujanovic Ljiljana N** Todorovic Natasa A Nikolov Jovana B Radovanovic Dragan D Sreckovic-Batocanin Danica R Jokic Anja B (2021), An overview of the radiation properties of spring water in the rural areas of Central Serbia, *International journal of environmental analytical chemistry*, 103(7):1-15

Nikolić Bujanovic Ljiljana, Ćekerevac Milan I, Simicic Milos V, Tomic Milena M, (2020) Encapsulation of micro-sized barium ferrate(VI) and its effectiveness in removing clomazone pesticide from water, *Journal of materials science*, , vol. 55 br. 17, str. 7295-7303

Markovic Smiljana M, Vuckovic Biljana S, **Nikolic-Bujanovic Ljiljana N**, Mrazovac-Kurilic Sanja M, Todorovic Natasa A, Nikolov Jovana B, Jokic Anja B, Djokic Boban S, (2020). Heavy metals and radon in spring water of Kosovo, *Scientific reports*, 10.

Miloš V. Simičić, Milan I. Ćekerevac, **Ljiljana N. Nikolić Bujanović**, Ivana Z. Veljković, Mladen Z. Zdravković, Milena M. Tomić, (2017), Influence of non-stoichiometric binary titanium oxides addition on the electrochemical properties of the barium ferrate plastic-bonded cathode for super-iron battery, *Electrochimica Acta* 247, 516–523,

Milan Ćekerevac, Miloš Simičić, **Ljiljana Nikolić Bujanović** , Negica Popović, (2012) The influence of silicate and sulphate anions on the anodic corrosion and the transpassivity of iron and silicon-rich steel in concentrated KOH solution, *Corrosion Science*, 64 204–212.

Ljiljana Nikolić-Bujanović, Milan Ćekerevac, Mirjana Vojinović-Miloradov, Anja Jokić, Miloš Simičić, (2012) , A comparative study of iron-containing anodes and their influence on electrochemical synthesis of ferrate(VI), *Journal of Industrial and Engineering Chemistry*, 18 1931–1936

Ružica Micić, Mitić Snežana, Arsić Biljana, Anja Jokić, Mitić Milan, Kostić Danijela, Pavlović Aleksandra, **Ljiljana Nikolić-Bujanović**, Milan Ćekerevac, Spalević Žaklina, (2015), Statistical characteristics of selected elements in vegetables from Kosovo, *Environmental Monitoring and Assessment*, doi 10. 1007/s10661-015-4606-3, crp. 2-14

Kristina Vojvodic, **Ljiljana Nikolic Bujanovic**, Sanja Mrazovac Kurilic, Novica Staletovic, (2021), Application of electrochemically synthesized ferrate(VI) in the process of removal of heavy metals from waters, *Journal of water chemistry and technology*, 43, 236–242

Ružica Micić, Anja Jokić, R Simonović, Biljana Arsić, Milan Mitić, T. GalonjaCoghill, Milan Ćekerevac, **Ljiljana Nikolić Bujanović**, (2019), Application of electrochemically synthesized

ferrates (VI) for the removal of Th(IV) from natural water samples, <i>Journal of Water Chemistry and Technology</i> , 41, 101–104
Kristina Vojvodić, Ljiljana Nikolić Bujanović , Sanja Mrazovac Kurilić, Novica Staletović, (2018) Application of ecofriendly oxidant ferrate(VI) in metallurgical processes of extracting copper, <i>Mining & Metallurgy Engineering Bor</i> , ISSN 2334-8836, br.3,
Milena Tomić, Ljiljana Nikolić Bujanović , Milan Čekerevac, Mladen Zdravković, Marijana Stamenković Đoković, (2017), Application of electrochemically synthesized ferrate(VI) in the treatment of phenol contaminated wastewater from wood industry, <i>Acta Technica Corviniensis - Bulletin of Engineering</i> 10(1), 39-42,
Ljiljana Nikolić-Bujanović , Milan Čekerevac, Milena Tomić, Mladen Zdravković, Stamenković Đoković Marijana, (2016) Pilot plant for treatment of raw drinking water with high content of arsenic using ferrate(VI), <i>Acta Tehnica Corviniensis – Bulletin of Engineering</i> , 9(2), 19-22
Ljiljana Nikolić-Bujanović , Milan Čekerevac, Milena Tomić, Mladen Zdravković, Miloš Simičić, (2015), Applying the bdd electrode in the process of removing pharmaceuticals by electrochemical oxidation, <i>Acta Tehnica Corviniensis – Bulletin of Engineering</i> , 8(2):71-74
Ljiljana Nikolić-Bujanović , Milan Čekerevac, Milena Tomić, Mladen Zdravković, (2015) Ibuprofen Removal from Aqueous Solution by In Situ Electrochemically-generated Ferrate(VI): Proof-of-Principle, <i>Water Science and Technology</i> , 73.2, 389-395.

TECHNICAL SOLUTIONS	
2017.	Miloš Simičić, Milan Čekerevac, Ljiljana Nikolić Bujanović , Ivana Veljković, Marko Rakin, Mladen Zdravković, Milena Tomić, Izrada “plastic bonded” katoda na bazi ferata(VI) kao aktivnog materijala primenom modifikatora na bazi Manjelijevih oksida Ti4O7 i Ti5O9 za primenu u elektrohemijskim izvorima električne energije, Odluka nastavno-naučnog veća TMF Univerziteta u Beogradu od 2017, <i>Битно побољшано техничко решење на међународном нивоу</i>
2015.	Ljiljana Nikolić Bujanović , Milan Čekerevac, Milena Tomić, Mladen Zdravković, “Laboratorijski pilot uređaj i postupak za uklanjanje arsena i organskih materija iz sirove vode za piće primenom ferata(VI)“ Odluka nastavno-naučnog veća Tehnološkog fakulteta u Leskovcu, Univerziteta u Nišu, 21.12.2015. godine broj 4/135-VIII, <i>prihvaćeno kao novo laboratorijsko postrojenje i novi tehnološki postupak</i>
2013.	Milan Čekerevac, Ljiljana Nikolić Bujanović , Milena Tomić, Mladen Zdravković, Hidrometalurški postupak izdvajanja bakra iz bakar sulfidnih ruda uz primenu ferata(VI). Odluka nastavno-naučnog veća TMF Univerziteta u Beogradu br.35/364-1 od 21.11.2013. <i>Bitno poboljšana tehnologija.</i>
2013	Sanja Bugarinović, Mladen Zdravković, Ljiljana Nikolić Bujanović , Milan Čekerevac, Milena Tomić, Gardić Vojka, Postupak uklanjanja jona teških metala iz voda elektrolitičke rafinacije bakra primenom ferata(VI), Odluka

	naučnog veća Instituta za rudarstvo i metalurgiju Bor br.XIV/4 od 14.05.2013. <i>Bitno poboljšana tehnologija</i>
2012.	Anja Jokić, Milan Čekerevac, Miloš Simičić, Ljiljana Nikolić Bujanović , Bojana Laban, „Postupak stabilizacije elektrohemijski dobijenih ferata(VI)“. IHIS Tehno-eksperts d.o.o., Beograd,. Odluka nastavno-naučnog veća PMF Univerziteta u Prištini, 16. Maja 2012. Br. 7/3. <i>Bitno poboljšana tehnologija</i>
2011.	Čekerevac Milan, Nikolić Bujanović Ljiljana , Mirković Marko, Jokić Anja, „Protočni elektrolizer za proizvodnju vodenog rastvora erata(VI) pogodnog za preradu voda različitog porekla“. Odluka nastavno naučnog veća PMF Univerziteta u Prištini, 01. Mart 2011. Br. 22/1, <i>prihvaćeno kao novo laboratorijsko postrojenje i novi tehnološki postupak</i>
2011.	Čekerevac Milan, Nikolić Bujanović Ljiljana , Mirković Marko, Jokić Anja, „Postupak sinteze BaFeO ₄ i Ag ₂ FeO ₄ “. Одлука nastavno-naučnog veća PMF Univerziteta u Prištini, 01. Mart 2011. Br. 23/1., <i>prihvaćeno kao novo laboratorijsko postrojenje i novi tehnološki postupak</i>