

PERSONAL INFORMATION

Nenad Joksimović



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Sex Male | Date of birth 06/05/1991 | Nationality Serbian

WORK EXPERIENCE

January 2021 – to date

Research Assistant

Faculty of Science, University of Kragujevac, Serbia; www.pmf.kg.ac.rs

March 2019 – January 2021

Research Assistant

Faculty of Science, University of Kragujevac, Serbia; www.pmf.kg.ac.rs

July 2015 - March 2019

Junior Researcher

Faculty of Science, University of Kragujevac, Serbia; www.pmf.kg.ac.rs

EDUCATION

2015 - 2020

PhD in Chemistry – Organic chemistry

Doctoral studies at Faculty of Science, University of Kragujevac, Serbia

- Thesis title: "Acylpyrates as precursors in the synthesis of selected biologically active compounds", supervised by professor Dr. Zorica Bugarčić

2014 - 2015

MSc degree in Chemistry

Studies of chemistry at Faculty of Science, University of Kragujevac, Serbia

2010 - 2014

BSc degree in Chemistry

Studies of chemistry at Faculty of Science, University of Kragujevac, Serbia

PERSONAL SKILLS

Mother tongue(s)

Serbian

Other language(s)

English

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
B2	B2	B2	B2	B2

Communicational / organisational skills

- good communication and organisation skills gained through the experience as teaching assistant and researcher
- initiative, persistent, communicative, willing to teamwork, competitive, friendly sociable, responsible, reliable, well-organized

- Job-related skills**
- good command of general synthetic techniques (including examination of the interactions of potential drugs with natural macromolecules)
 - good command of spectroscopic techniques (IR, NMR)

- Computer skills**
- MS Office
 - ChemBioOffice
 - SciFinder

ADDITIONAL INFORMATION

- Projects**
- Investigation of the mechanism of reactions of transition metal ion complexes with biologically significant molecules (07/2016 – 12/2019);
 - COST Action CA18202, NECTAR – Network for Equilibria and Chemical Thermodynamics Advanced Research
 - Repository of Open Educational Resources for Laboratory Support in Engineering and Natural Sciences! The RELAB Erasmus + KA2 project.
 - Proof of concept 2023: New method of inactivation of sewage sludge using biocompatible beta-diketo esters and its potential use in agriculture. Acronym: BETAgro. Principal investigator (PI): Dr. Nenad Joksimović
 - Project for international cooperation of the Ministry of Science, Technological Development and Innovation of the Republic of Serbia (NITRA) and the Scientific and Technological Research Council of Turkey (TÜBİTAK) 2023: Synthesis, characterization and anticancer potential of selected Biginelli hybrids and their nanocomposites

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ANNEXES

- Publications;
- International Conferences;
- National Conferences.

Publications

1. **Nenad Joksimović**, Dejan Baskić, Suzana Popović, Milan Zarić, Marijana Kosanić, Branislav Ranković, Tatjana Stanojković, Sladjana B. Novaković, Goran Davidović, Zorica Bugarčić, Nenad Janković, Synthesis, characterization, biological activity, DNA and BSA binding study: novel copper(II) complexes with 2-hydroxy-4-aryl-4-oxo-2-butenolate, *Dalton Transactions*, (2016), vol. 45, str. 15067–15077. doi: 10.1039/C6DT02257J
2. Nenad Janković, Srđan Stefanović, Jelena Petronijević, **Nenad Joksimović**, Slađana B. Novaković, Goran A. Bogdanović, Jovana Muškinja, Milan Vraneš, Zoran Ratković and Zorica Bugarčić, Water-tuned tautomer-selective tandem synthesis of the 5,6-Dihydropyrimidin-4(3H)-ones, driven under the umbrella of sustainable chemistry, *ACS Sustainable Chemistry and Engineering*, (2018), vol. 6, str. 13358–13366. doi:10.1021/acssuschemeng.8b03127
3. Marijana Gavrilović, Nenad Janković, Ljubinka Joksović, Jelena Petronijević, **Nenad Joksimović**, Zorica Bugarčić, Water ultrasound-assisted oxidation of 2-oxo-1,2,3,4-tetrahydropyrimidines and benzylic acid salts, *Environmental Chemistry Letters*, (2018), vol. 16, str. 1501-1506. doi: 10.1007/s10311-018-0766-z.
4. Jelena Petronijević, Nenad Janković, Tatjana P. Stanojković, **Nenad Joksimović**, Nađa Đ. Grozdanić, Milan Vraneš, Aleksandar Tot, Zorica Bugarčić, Biological evaluation of selected 3,4-dihydro-2(1H)-quinoxalinones and 3,4-dihydro-1,4-benzoxazin-2-ones: Molecular docking study, *Archive der Pharmazie Chemie in Life Sciences*, 2018, vol. 351, str. 1700308. doi: 10.1002/ardp.201700308
5. Nenad Janković, Jovana Trifunović, Milan Vraneš, Aleksandar Tot, Jelena Petronijević, **Nenad Joksimović**, Tatjana Stanojković, Marija Đorđić Crnogorac, Nina Petrović, Ivana Boljević, Ivana Z. Matić, Goran A. Bogdanović, Momir Mikov, Zorica Bugarčić, Discovery of the Biginelli hybrids as novel caspase-9 activators in apoptotic machines: lipophilicity, molecular docking study, influence on angiogenesis gene and miR-21 expression levels, *Bioorganic Chemistry*, (2019), vol. 86, str. 569-582. doi: 10.1016/j.bioorg.2019.02.026.
6. **Nenad Joksimović**, Jelena Petronijević, Nenad Janković, Dejan Baskić, Suzana Popović, Danijela Todorović, Sanja Matić, Goran A. Bogdanović, Milan Vraneš, Aleksandar Tot, Zorica Bugarčić, Synthesis, characterization, anticancer evaluation and mechanisms of cytotoxic activity of novel 3-hydroxy-3-pyrrolin-2-ones bearing thenoyl fragment: DNA, BSA interactions and molecular docking study, *Bioorganic Chemistry*, (2019), vol. 88, str. 102954. doi: 10.1016/j.bioorg.2019.102954.
7. **Nenad Joksimović**, Nenad Janković, Jelena Petronijević, Dejan Baskić, Suzana Popović, Danijela Todorović, Milan Zarić, Olivera Klisurić, Milan Vraneš, Aleksandar Tot, Zorica Bugarčić, Synthesis, Anticancer Evaluation and Synergistic Effects with cisplatin of Novel Palladium Complexes: DNA, BSA Interactions and Molecular Docking Study, *Medicinal Chemistry*, (2019). doi: 10.2174/1573406415666190128095732.
8. Jelena Petronijević, **Nenad Joksimović**, Zorica Bugarčić, Elvira Đurđić, Nenad Janković, Experimental and computational analysis (DFT method) of some quinoxalinones and benzoxazinones: spectroscopic investigation (FTIR, FT-Raman, UV-Vis, NMR), *Journal of Chemical Sciences*, 2019, vol. 131, str. 106. doi: 10.1007/s12039-019-1681-y.
9. Emilija Milović, Nenad Janković, Milan Vraneš, Srđan Stefanović, Jelena Petronijević, **Nenad Joksimović**, Jovana Muškinja and Zoran Ratković, Green one-pot synthesis of pyrido-dipyrimidine DNA-base hybrids in water, *Environmental Chemistry Letters*, (2020). doi: 10.1007/s10311-020-01076-9.
10. **Nenad Joksimović**, Nenad Janković, Goran Davidović and Zorica Bugarčić, 2,4-Diketo esters: Crucial intermediates for drug discovery, *Bioorganic Chemistry*, (2020), vol. 105, str. 104343. doi:10.1016/j.bioorg.2020.104343
11. **Nenad Joksimović**, Jelena Petronijević, Nenad Janković, Marijana Kosanić, Dušan Milivojević, Milan Vraneš, Aleksandar Tot, Zorica Bugarčić, Synthesis, characterization, antioxidant activity of β -diketonates, and effects of coordination to copper(II) ion on their activity: DNA, BSA interactions and molecular docking study, *Medicinal Chemistry*, (2021), vol. 17, str. 519. doi: 10.2174/1573406415666191024102520.
12. Emilija Milović, Nenad Janković, Goran A. Bogdanović, Jelena Petronijević, **Nenad Joksimović**, On water synthesis of the novel 2-oxo-1,2,3,4-tetrahydropyrimidines, *Tetrahedron*, (2021), vol. 78, str. 131790. doi: 10.1016/j.tet.2020.131790.
13. **Nenad Joksimović**, Jelena Petronijević, Dušan Ćocić, Nenad Janković, Emilija Milović, Marijana Kosanić, Nevena Petrović, Synthesis, characterization, biological evaluation, BSA binding properties, density functional theory and molecular docking study of Schiff bases, *Journal of Molecular Structure*, (2021), vol. 1244, str. 13095. doi: 10.1016/j.molstruc.2021.130952.

14. Jelena Petronijević, **Nenad Joksimović**, Emilija Milović, Marija Đorđić Crnogorac, Nina Petrović, Tatjana Stanojković, Dušan Milivojević, Nenad Janković, Antitumor activity, DNA and BSA interactions of novel copper(II) complexes with 3,4-dihydro-2(1H)-quinoxalinones, *Chemico-Biological Interactions*, (2021), vol. 348, str. 109647. doi: 10.1016/j.cbi.2021.109647.
15. Milović, E., Janković, N.*, Petronijević, J., **Joksimović, N.**, Kosanić, M., Stanojković, T., Matić, I., Grozdanić, N., Klisurić, O., Stefanović, S. (2022): Synthesis, characterization, and biological evaluation of tetrahydropyrimidines: Dual-activity and mechanism of action. *Pharmaceutics*, 2022, 14(10), 2254.
16. Mihajlović, K., **Joksimović, N.**,* Petronijević, J., Filipović, I., Janković, N., Milović, E., Popović, S., Matić, S., Baskić, D. (2022): Anticancer potential of some β -diketonates: DNA interactions, protein binding properties, and molecular docking study. *Natural Product Research*, 22, 1-7.
17. **Joksimović, N.**,* Petronijević, J., Radisavljević, S., Petrović, B., Mihajlović, K., Janković, N., Milović, E., Milivojević, D., Ilić, B., Đurić, A.* (2022): Synthesis, characterization, antitumor potential, and investigation of mechanism of action of copper(II) complexes with acylpyruvates as ligands: interactions with biomolecules and kinetic study. *RSC Advances*, 12, 30501-30513.
18. **Joksimović, N.**, Selaković, D., Jovičić, N., Janković, N., Pradeepkumar, P., Eftekhari, A., Rosić, G.* (2022): Nanoplastics as an invisible threat to humans and the environment. *Journal of Nanomaterials*, 2022, 6707819.
19. Mihajlović, K., **Joksimović, N.**,* Radisavljević, S., Petronijević, J., Filipović, I., Janković, N., Milović, E., Popović, S., Matić, S., Baskić, D. (2022): Examination of antitumor potential of some acylpyruvates, interaction with DNA and binding properties with transport protein. *Journal of Molecular Structure*, 1270, 133943.
20. **Joksimović, N.**,* Petronijević, J., Milović, E., Janković, N., Kosanić, M., Petrović, N. (2022): Antioxidant and antimicrobial potential, BSA and DNA binding properties of some 3-Hydroxy-3-Pyrrolin-2-Ones bearing thenoyl fragment. *Medicinal Chemistry*, 18(7), 784-790.
21. **Joksimović, N.**,* Petronijević, J., Milović, E., Janković, N., Baskić, D., Popović, S., Todorović, D., Matić, S., Vraneš, M., Tot, A. (2022): Synthesis, characterization, antitumor potential, BSA and DNA binding properties, and molecular docking study of some novel 3-hydroxy-3-pyrrolin-2-ones. *Medicinal Chemistry*, 18(3), 337-352.
22. Branković, S., Bugarčić, M., Bugarčić, Ž.F., Ostojić, A., Petronijević, J., Rosić, G., Radojević, I., Selaković, D., Simić, Z., **Joksimović, N.*** (2022): Economic, ecological, and health aspects of β -diketonate application in the process of water purification. *Environmental Science and Pollution Research*, 29(39), 58703.
23. Milović, E., Petronijević, J., **Joksimović, N.**, Beljkaš, M., Ružić, D., Nikolić, K., Vraneš, M., Tot, A., Đorđić Crnogorac, M., Stanojković, T., Janković, N.* (2022): Anticancer evaluation of the selected tetrahydropyrimidines: 3D-QSAR, cytotoxic activities, mechanism of action, DNA, and BSA interactions. *Journal of Molecular Structure*, 1257, 132621.
24. Nenad Janković, Julijana Tadić, Emilija Milović, Zoran Marković, Svetlana Jeremić, Jelena Petronijević, **Nenad Joksimović**, Teona Teodora Borović, and Syed Nasir Abbas Bukhari (2023): Investigation of the radical scavenging potential of vanillin-based pyrido-dipyrimidines: experimental and in silico approach. *RSC Adv.* 13, 15236.
25. Kristina Mihajlović, **Nenad Joksimović***, Nenad Janković, Emilija Milović, Jelena Petronijević, Ignjat Filipović, Jovana Muškinja, Nevena Petrović, Marijana Kosanić (2023): Synthesis, characterization, and biological activity of some 2,4-diketo esters containing dehydrozingerone fragment: DNA and protein binding study. *Bioorg Med Chem Lett*, 93, 129413.
26. Nenad Joksimović, Jelena Petronijević, Marina Serafinović, Nenad Janković, Dejan Baskić. (2024) Anticancer potential of novel palladium(II) complexes with acyl pyruvates as ligands: DNA and BSA interactions and molecular docking study. *STED Journal*. DOI 10.7251/STED2401001J
27. Nenad Joksimović, Jelena Petronijević, Dušan Čočić, Marija Ristić, Kristina Mihajlović, Nenad Janković, Emilija Milović, Olivera Klisurić, Nevena Petrović, Marijana Kosanić (2024): Synthesis, characterization, and biological evaluation of novel cobalt(II) complexes with β -diketonates: crystal structure determination, BSA binding properties and molecular docking study. *Journal of Biological Inorganic Chemistry*. DOI 10.1007/s00775-024-02069-7
28. Milović, E., Ristovski, J.T., Stefanović, S., Petronijević, J., Joksimović, N., Matić, I.Z., Đurić, A., Ilić, B., Klisurić, O., Radan, M. and Nikolić, K., (2024) Synthesis, in vitro anticancer activity, and pharmacokinetic profiling of the new tetrahydropyrimidines: Part I. *Archiv der Pharmazie*, p.e2400403.
29. Obradović, Radojko, Nenad Joksimović, Nenad Janković, Marijana Kosanić, Jovana Matić, Emilija Milović, Goran A. Bogdanović, and Jelena Petronijević (2024)"Discovery of Schiff bases as potent antibacterial and antifungal agents." *New Journal of Chemistry*.

International Conferences

1. **Nenad Joksimović**, Jelena Petronijević, Nenad Janković, Vesna Stanojlović, BSA binding study of copper(II) complexes with 2-hydroxy-4-aryl-4-oxo-2-butenolate and their effects on apoptosis and cell cycle in A549 cell line, *24th Young Research Fellow Meeting*, 8-10 February 2017, Paris, France, PC 069.
2. Jelena Petronijević, **Nenad Joksimović**, Nenad Janković, Vera Divac, Synthesis of 3,4-dihydro-2(1H)-quinoxalinones-based potential pharmacophores in lemon juice, *24th Young Research Fellow Meeting*, 8-10 February 2017, Paris, France, PC 083.
3. Vesna Stanojlović, **Nenad Joksimović**, Nenad Janković, Zorica Bugarčić, Synthesis, characterization and cytotoxic activity of 2-hydroxy-4-aryl-4-oxo-2-butenolate, *24th Young Research Fellow Meeting*, 8-10 February 2017, Paris, France, PC 085.
4. Jelena Petronijević, **Nenad Joksimović**, Emilija Milović, Nenad Janković, Biginelli hybrids as antitumor agents: mechanism of action, *6th EFMC Young Medicinal Chemist Symposium*, 5-6 September 2019, Athens, Greece, P-074.
5. **Nenad Joksimović**, Jelena Petronijević, Emilija Milović, Nenad Janković, Synthesis, anticancer evaluation and mechanism of cytotoxic activity of 3-hydroxy-3-pyrrolin-2-ones bearing thenoyl fragment, *6th EFMC Young Medicinal Chemist Symposium*, 5-6 September 2019, Athens, Greece, P-042.

National Conferences

1. Nenad Janković, Vesna Stanojlović, Jelena Petronijević, **Nenad Joksimović**, Zorica Bugarčić, Functionalization of 2-thioxo-1,2,3,4-tetrahydropyrimidine and synthesis of novel chalcones under solvent-free conditions, *52nd Meeting of the Serbian Chemical Society*, 29-30 May 2015, Novi Sad, Republic of Serbia, Book of Abstracts, OH P07, p. 121.
2. **Nenad Joksimović**, Nenad Janković, Vesna Stanojlović, Jelena Petronijević, Synthesis and characterization of novel pyrimidine tricyclic derivatives, *Treća konferencija mladih hemičara Srbije*, 24. oktobar 2015, Beograd, Srpsko hemijsko društvo, Book of Abstracts, HS P08, p. 35.
3. Jelena Petronijević, **Nenad Joksimović**, Vesna Stanojlović, Nenad Janković, Meldrum's acid as a C2-sinton, *Treća konferencija mladih hemičara Srbije*, 24. oktobar 2015, Beograd, Srpsko hemijsko društvo, Book of Abstracts, HS P11, p. 38.
4. Nenad Janković, Vesna Stanojlović, Jelena Petronijević, **Nenad Joksimović**, Synthesis of novel Biginelli analogs with 1,3-thiazine ring, *Treća konferencija mladih hemičara Srbije*, 24. oktobar 2015, Beograd, Srpsko hemijsko društvo, Book of Abstracts, HS P13, p. 40.
5. Nenad Janković, Vesna Stanojlović, Jelena Petronijević, **Nenad Joksimović**, Snežana Đorđević, Vera Divac, Marina Rvović, Zorica Bugarčić, Application of acyl pyruvates in synthetic chemistry, *53rd Meeting of the Serbian Chemical Society*, 10-11 Jun 2016, Kragujevac, Republic of Serbia, Book of Abstracts, OH P16, p. 114.
6. **Nenad Joksimović**, Zorica Bugarčić, Nenad Janković, Goran Davidović, Synthesis, biological activity and DNA binding study of novel copper(II) complexes with 2-hydroxy-4-aryl-4-oxo-2-butenolate, *Četvrta konferencija mladih hemičara Srbije*, Beograd, 5. novembar, 2016, pp. 58.
7. Vera Divac, Marina Rvović, Nenad Janković, **Nenad Joksimović**, Regioselectivity and kinetics of cobalt(II) chloride catalyzed phenylselenocyclization of 6-methyl-hept-5-en-2-ol, *53rd Meeting of the Serbian Chemical Society*, Srbija, Kragujevac, 10.-11. Jun, 2016, pp. 108.
8. Jelena M. Petronijević, **Nenad Joksimović**, Marina Kostić, Vera Divac and Nenad Janković, Biološka aktivnost 3,4-dihidro-2(1H)-hinoksalinona i 3,4-dihidro-1,4-benzoksazin-2-ona, *55. Savetovanje Srpskog hemijskog društva*, 8-9. Jun 2018, Novi Sad, Book of abstracts, OH P11 (str. 99).
9. Emilija Milović, **Nenad Joksimović**, Jelena Petronijević, Nenad Janković, Green synthesis of bicyclic thiazolo-pyrimidines, *7th Conference of the Young Chemists of Serbia*, Belgrade, 2nd November 2019, Book of Abstracts, CS PP 06.

10. **Nenad Joksimović**, Jelena Petronijević, Emilija Milović, Nenad Janković, Antioxidant activity of β -diketonates and effects of coordination to copper(II) ion on their activity, *7th Conference of the Young Chemists of Serbia*, Belgrade, 2nd November 2019, Book of Abstracts, MC PP 01.
11. Jelena Petronijević, **Nenad Joksimović**, Emilija Milović, Nenad Janković, Experimental and computational analysis (DFT method) of some quinoxalinones and benzoxazinones, *7th Conference of the Young Chemists of Serbia*, Belgrade, 2nd November 2019, Book of Abstracts, TC PP 01.