

PERSONAL INFORMATION

Name and surname	Jelena Đorović Jovanović
Date and place of birth	1985. Kragujevac
Scientific title	Research associate
E-mail	jelena.djorovic@uni.kg.ac.rs
Educational-scientific / educational-artistic field	Natural sciences
University, Faculty, Organizational unit	University of Kragujevac, Institute for Information Technologies, Department of Science
Research field and areas	Chemistry

EDUCATION

BACHELOR

Year	2010.
Place	Kragujevac
Institution	University of Kragujevac, Faculty of Science

DOCTORAL DISSERTATION

Year	2017.
Place	Kragujevac
Institution	University of Kragujevac, Faculty of Science
Title of doctoral dissertation	Examination of antioxidant and pro-oxidative activity of selected phenol type compounds
Scientific title	Research associate
Research area	Organic Chemistry

PROFESSIONAL BIOGRAPHY – ELECTION IN RESEARCH OR SCIENTIFIC TITLE

Date	Institution	Scientific title
23.03.2016.	University of Kragujevac, Faculty of Science	Research assistant

27.03.2019.	Ministry of Education, Science and Technological Development of the Republic of Serbia	Research associate
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PROFESSIONAL BIOGRAPHY - TRAINING

Year	Institution	Duration
2011	Gaussian Workshop , Santiago de Compostela, Spain	5 days
2013	Institute of Molecular Modeling and Simulation (MMS), University of Natural Resources and Life Sciences, Vienna	1 month
2014	3rd Course of the Training School COST Action NAMABIO MP1005, Croatian Institute for Brain Research, School of Medicine, University of Zagreb	4 days
2014	12th Greta Pifat Mrzljak International School of Biophysics, Primošten, Croatian	10 days
2015	Institute of Molecular Modeling and Simulation (MMS), University of Natural Resources and Life Sciences, Vienna	3 months
2016	Institute of Molecular Modeling and Simulation (MMS), University of Natural Resources and Life Sciences, Vienna	1 month

PARTICIPATION IN NATIONAL PROJECTS FINANCED BY MINISTRY OF EDUCATION/MINISTRY OF SCIENCE AND TECHNOLOGICAL DEVELOPMENT/SCIENCE FUND OF THE REPUBLIC OF SERBIA:

2012 - 2013 Innovation project of the Ministry of Education, Science and Technological Development "Development of software-hardware system for biomechanical analysis of athletes" (no. 451-03-0065/2012-16/186).
2013-2019 Project of the Ministry of The Republic of Serbia: "Methods of multiscale modeling with applications in biomedicine."

PARTICIPATION IN INTERNATIONAL PROJECTS

2014 - 2015 Bilateral project between the Republic of Serbia and the Republic of France: "Development of Theoretical Methodology for

Polyphenol Antioxidant Evaluation: Towards real-word applications"; Ministry of Education, Science and Technological Development of Republic Serbia (No. 451-03-3455/2013-09/17).

2016 - 2017 Bilateral project of the Republic of Serbia and Republic of Croatia: "Investigation of chemism and antioxidant activity of the complexes of polyphenolic compounds with essential metals"; Ministry of Education, Science and Technological Development of Republic Serbia.

2019 – 2020 The bilateral project between the Republic of Serbia and the Republic of Slovakia: "Synergy of experiment and theory: antioxidative action of phenolic compounds derivatives"; Ministry of Education, Science and Technological Development of Republic Serbia (No. 337-00-107/2019-09/10).

MEMBERSHIP IN SCIENTIFIC AND PROFESSIONAL ASSOCIATIONS

Since **2014** Member of the Society of Biophysicists of Serbia

Since **2016** Member of the Serbian Chemical Society

ORGANIZATION OF NATIONAL/INTERNATIONAL SCIENTIFIC MEETINGS (CONFERENCES, CONGRESSES...)

2019 Organizer of Mini-symposia APPLIED COMPUTATIONAL CHEMISTRY at 8th International Conference on Computational Bioengineering (ICCB2019), September 4th to 6th 2019.

2021 Vice-chairman of local committee 1st International Conference on Chemo and BioInformatics, Kragujevac, Serbia, on October 26-27, 2021.

LIST OF SCIENTIFIC PAPERS:

Monographs, Monographic studies, Thematic anthologies	Sum 1
1. J. Đorović, Z. Marković, Antioxidative Properties of Usnic Acid and Its Interaction with Tyrosyl-DNA Phosphodiesterase, Computational Bioengineering and Bioinformatics. ICCB 2019. ISBN: 978-3-030-43657-5,	

Springer, Cham, Learning and Analytics in Intelligent Systems, vol 11. Springer, Cham, doi.org/10.1007/978-3-030-43658-2_8, pp 80-91, 2020.

Papers published in scientific journals of international scientific importance	Sum 30
1. Z. Marković, D. Milenković, J. Đorović, J. Dimitrić-Marković, V. Stepanić, B. Lučić, D. Amić: PM6 and DFT study of free radical scavenging activity of morin, Food. Chem., (2012) 134: 1754–1760; DOI: 10.1016/j.foodchem.2012.03.124. 2. Z. Marković, D. Milenković, J. Đorović, J. Dimitrić-Marković, V. Stepanić, B. Lučić, D. Amić: Free radical scavenging activity of morin 2'-O-phenoxide anion, Food. Chem., (2012) 135: 2070-2077; DOI: 10.1016/j.foodchem.2012.05.119. 3. Z. Marković, D. Milenković, J. Đorović, J. Dimitrić-Marković, B. Lučić, D. Amić: Free Radical Scavenging Activity of Ellagic Acid and Ellagate Anions, Monatsh. Chem., (2013) 114: 803-812; DOI: 10.1007/s00706-013-0949-z. 4. Z. Marković, J. Đorović, M. Dekić, M. Radulović, S. Marković, M. Ilić: DFT study of free radical scavenging activity of erodiol, Chem. Pap., (2013) 67:1453-1461; DOI: 10.2478/s11696-013-0402-0. 5. J. Đorović, J. M. Dimitrić-Marković, V. Stepanić, N. Begović, D. Amić, Z. Marković: Influence of different free radicals on scavenging potency of gallic acid, J. Mol. Model., (2014) 20: 2345; DOI: 10.1007/s00894-014-2345-y. 6. Z. Marković, J. Đorović, J. M. Dimitrić-Marković, M. Živić, D. Amić: Investigation of the radical scavenging potency of the hydroxybenzoic acids and their carboxylate anions, Monatsh. Chem., (2014) 145: 953-962, DOI 10.1007/s00706-014-1163-3. 7. Z. D. Petrović, J. Đorović, D. Simijonović, V. P. Petrović, Z. S. Marković: Experimental and theoretical study of antioxidative properties of some salicylaldehyde and vanillic Schiff bases, RSC Advances, (2015) 5: 24094-24100; DOI: 10.1039/c5ra02134k. 8. V. P. Petrović, M. N. Živanović, D. Simijonović, J. Đorović, Z. D. Petrović, S. D. Marković: Chelate N,O-palladium(II) complexes: synthesis, characterization and biological activity, RSC Advances, (2015) 5: 86274–86281; DOI: 10.1039/c5ra10204a. 9. Z. Marković, J. Đorović, Z. D. Petrović, V. P. Petrović, D. Simijonović: Investigation of the antioxidative and radical	

- scavenging activities of some phenolic Schiff bases with different free radicals, *J. Mol. Model.*, (2015) 21: 293; DOI 10.1007/s00894-015-2840-9.
10. M. Filipović, Z. Marković, **J. Đorović**, J. Dimitrić Marković, B. Lučić, D. Amić: QSAR of the free radical scavenging potency of selected hydroxybenzoic acids and simple phenolics, *CR Chim*, (2015) 18: 492–498, DOI: 10.1016/j.crci.2014.09.001.
 11. Z. Marković, **J. Đorović**, J. M. Dimitrić-Marković, R. Biočanin, D. Amić: Comparative density functional study of antioxidative activity of the hydroxybenzoic acids and their anions, *Turk. J. Chem.*, (2016) 40: 499–509; DOI: 10.3906/kim-1503-89.
 12. **J. Đorović**, Z. Marković, Z. D. Petrović, D. Simijonović, V. P. Petrović: Theoretical analysis of the experimental UV–vis Absorption Spectra of Some Phenolic Schiff bases. *Mol. Phys.*, (2017) 115: 1–9. DOI: 10.1080/00268976.2017.1324183.
 13. D. Milenković, **J. Đorović**, S. Jeremić, J. M. Dimitrić Marković, E. H. Avdović, Z. Marković: Free radical scavenging potency of dihydroxybenzoic acids, *J. Chem.- NY* (2017) 2017: 1–9; DOI: 10.1155/2017/5936239.
 14. V. P. Petrović, M. N. Živanović, D. Simijonović, **J. Đorović**, Z. D. Petrović, S. D. Marković, Study of the structure, prooxidative, and cytotoxic activity of some chelate copper(II) complexes, *Chem. Pap.* (2017) 71: 2075–2083; DOI: 10.1007/s11696-017-0200-1.
 15. Z. D. Petrović, D. Simijonović, **J. Đorović**, V. Milovanović, Z. Marković, V. P. Petrović: One-Pot Synthesis of Tetrahydropyridine Derivatives: Liquid Salt Catalyst vs Glycolic Acid Promoter. Structure and Antiradical Activity of the New Products. *ChemistrySelect* (2017) 2: 11187–11194. DOI: 10.1002/slct.201701873.
 16. D. Milenković, **J. Đorović**, V. Petrović, E. H. Avdović, Z. Marković: Hydrogen atom transfer versus proton coupled electron transfer mechanism of gallic acid with different peroxy radicals, *React Kinet, Mech Cat* (2018) 123: 215–230. DOI: 10.1007/s11144-017-1286-8.
 17. Z. D. Petrović, **J. Đorović**, D. Simijonović, S. Trifunović and V. P. Petrović: In vitro study of iron coordination properties, anti-inflammatory potential, and cytotoxic effects of N-salicylidene and N-vanillidene anil Schiff bases, *Chem. Pap.* (2018): 1–10. DOI: 10.1007/s11696-018-0419-5.
 18. E. H. Avdović, D. Milenković, J. M. Dimitrić Marković, **J. Đorović**, N.

- Vuković, M. D. Vukić, V. V. Jevtić, S. R. Trifunović, Ivan Potočňák, Zoran Marković: Synthesis, spectroscopic characterization (FT-IR, FT-Raman, and NMR), quantum chemical studies and molecular docking of 3-(1-(phenylamino)ethylidene)-chroman-2,4-dione, *Spectrochimica Acta A*, (2018) 195: 31-40; DOI: 10.1016/j.saa.2018.01.023.
19. E. H. Avdović, D. S. Dimić, J. M. Dimitrić Marković, N. Vuković, M. Đ. Radulović, M. N. Živanović, N. D. Filipović, **J. R. Đorović**, S. R. Trifunović, Z. S. Marković: Spectroscopic and theoretical investigation of the potential anti-tumor and anti-microbial agent, 3-(1-((2-hydroxyphenyl)amino)ethylidene)chroman-2,4-dione, *Spectrochimica Acta A*, (2019) 206: 421-429; <https://doi.org/10.1016/j.saa.2018.08.034>.
 20. D. S. Dimić, Z. S. Marković, L. Saso, E. H. Avdović, **J. R. Đorović**, I. P. Petrović, D. D. Stanisavljević, M. J. Stevanović, I. Potočňák, E. Samolová, and S. R. Trifunović, Synthesis and Characterization of 3-(1-((3, 4-Dihydroxyphenethyl) amino) ethylidene)-chroman-2, 4-dione as a Potential Antitumor Agent. *Oxidative Medicine and Cellular Longevity*, (2019) 2019: 9, <https://doi.org/10.1155/2019/2069250>.
 21. **J. Đorović**, D. Milenković, Lj. Joksović, M. Joksović, Z. Marković: Study of influence of free radical species on antioxidant activity of selected 1,2,4-triazole-3-thiones, *ChemistrySelect* (2019) 4: 7476-7485. <https://doi.org/10.1002/slct.201900895>.
 22. Ž. Milanović, M. Antonijević, **J. Đorović**, D. Milenković, Comparative Antiradical Activity and Molecular Docking Study of Bergaptol and Xanthotoxol, *Journal of the Serbian Society for Computational Mechanics, Special issue* (2020) 71-84. DOI: 10.24874/jsscm.2020.01.07.
 23. D. Milenković, **J. Đorović**, E. Avdović, Ž. Milanović, M. Antonijević, Thermodynamic and Kinetic Investigation of Antiradical Potential of Cyanidin, *Journal of the Serbian Society for Computational Mechanics, Special issue* (2020) 85-95. DOI: 10.24874/jsscm.2020.01.08.
 24. **J. Đorović**, M. Antonijević, Z. Marković, Antioxidative and Inhibition Potency of Cynodontin, *Journal of the Serbian Society for Computational Mechanics, Special issue* (2020), 59-70. DOI: 10.24874/jsscm.2020.01.06
 25. **J. Đorović Jovanović**, N. Manojlović, Z. Marković, Usnic Acid as a

Potential Free Radical Scavenger and its Inhibitory Activity Toward SARS-CoV-2 Proteins, J COMPUT BIOPHYS CHE. 20, 655-666, 2021.ISSN: 2737-4165. DOI: 10.1142/S2737416521500393.

26. **J. Đorović Jovanović**, M. Antonijević, A. A El-Emam, Z. Marković, Comparative MD Study of Inhibitory Activity of Opaganib and Adamantane-Isothiourea Derivatives toward COVID-19 Main Protease Mpro, ChemistrySelect, 8603-8610, 2021.ISSN: 2365-6549 DOI: 10.1002/slct.202101898.

27. S. Šaćirović, **J. Đorović Jovanović**, D. Dimić, Z. Petrović, D. Simijonović, N. Manojlović, M. Antić, Z. Marković, On the origin of the antioxidant potential of selected wines: combined HPLC, QSAR, and DFT study, Monatsh. Chem., 152, 1173-1181, 2021. ISSN: 0026-9247 DOI: 10.1007/s00706-021-02828-1.

28. N. Janković, E. Milović, **J. Đorović Jovanović**, Z. Marković, M. Vraneš, T. Stanojković, I. Matić, M.Đ. Crnogorac, O. Klisurić, M. Cvetinov and S.N.A. Bukhari, 2022. A new class of half-sandwich ruthenium complexes containing Biginelli hybrids: anticancer and anti-SARS-CoV-2 activities. Chemico-biological interactions, 363, p.110025, doi.org/10.1016/j.cbi.2022.110025.

29. **J. Đorović Jovanović**, M. Antonijević, R. Vojinović, N.D. Filipović and Z. Marković, 2022. In silico study of inhibitory capacity of sacubitril/valsartan toward neprilysin and angiotensin receptor. RSC advances, 12(46), pp.29719-29726, DOI: 10.1039/d2ra04226f.

30. D. Ramarajan, **J. Đorović Jovanović**, Z. Marković, D. Dimić, and S. Sudha, 2022. Spectroscopic, molecular docking, and ecotoxicology analyses of the monomer and dimers of 3-aminocyclohexa-2, 6-diene-1-sulfonic acid—a theoretical approach. Journal of Chemical Sciences, 134(3), pp.1-12, DOI: 10.1007/s12039-022-02077-7.

Proceedings of international scientific conferences	Sum
	43
1. J. M. Dimitrić Marković, Z. S. Marković, T. P. Brdarić, D. Milenković, J. Đorović, B. Lučić, D. Amić: Application of comparative vibrational spectroscopic and mechanistic studies in qualitative analysis of morin structure; 11th International Conference on Fundamental and Applied Aspects of Physical Chemistry, Beograd 2012, Book of abstracts 128-130.	

2. **J. Đorović**, Z. Marković, D. Milenković, D. Amić, S. Marković: Antioxidant activity of quercetin: HAT versus SET-PT mechanism, 4th International Congress of Serbian Society of Mechanics, Vrnjačka Banja 2013, Book of abstracts, 849-854.
3. **J. Đorović**, Z. Marković: Examination of antioxidant properties of gallic acid, Conference of agronomy students with international participation, Čačak 2013, Book of abstracts, 25-33.
4. Z. Marković, **J. Đorović**, D. Milenković, B. Lučić, D. Amić: Examination of antioxidant activity of gallic acid in reaction with metylperoxyl radical, First Adriatic Symposium on Biophysical Approches in Biomedical Studies, Split 2014, Proceedings, 61.
5. Z. Marković, D. Milenković, **J. Đorović**, D. Amić, B. Lučić, D. Amić: Investigation of the reaction of baicalein and fisetin with hydroxyl radical, First Adriatic Symposium on Biophysical Approches in Biomedical Studies, Split 2014, Proceedings, 67.
6. **J. Đorović**, Z. Marković: Examination of antioxidant activity of gallic acid with different radicals, The 11th Greta Pifat-Mrzljak International School of Biophysics, Primošten 2014, Book of abstracts, 63.
7. J. Dimitrić Marković, Z. Marković, D. Milenković, **J. Đorović**, Energy requirements of the reactions of kaempferol and selected radical species in different media, 12th International Conference on Fundamental and Applied Aspects of Physical Chemistry, Beograd 2014, Book of abstracts 140-143.
8. **J. R. Đorović**, D. A. Milenković, Z. S. Marković: Study of electron transfer mechanism of gallic acid, 15th IEEE International Conference on BioInformatics and BioEngineering, Belgrade 2015.
9. **J. Đorović**, D. Milenković, Z. Marković, Z. Petrović, D. Simijonović, V. Petrović: UV-VIS spectra of some phenolic Schiff bases: experimental and theoretical study, 28th MC2 Conference, Dubrovnik 2016, Book of abstracts.
10. **J. Đorović**, Z. Marković, S. Jeremić, D. Milenković, Investigation of the antioxidative and radical scavenging activities of 2,4-, 2,5-, 3,5-dihydroxybenzoic acids, 2nd EAI International Conference on Future Access Enablers of Ubiquitous and Intelligent Infrastructures (Fabulous 2016), October 24.-25, 2016. Belgrade, Serbia.
11. S. D. Marković, **J. Đorović**, Z. Petrović, A. Amić: Examination of antioxidant activity of three dihydroxibenzoic acid, 13th

International Conference on Fundamental and Applied Aspects of Physical Chemistry, Beograd 2016, Book of abstracts 71-74.

12. **J. Đorović**, Z. Marković, Z. Petrović, D. Simijonović, V. Petrović: Examination of antioxidant activity of phenolic functionalized piperidine, The 29th International Course and Conference on the Interfaces among Mathematics, Chemistry and Computer Sciences (Math/Chem/Comp, MC2-29), June 17–24, 2017, Dubrovnik, Croatia.
13. **J. Đorović**, D. Milenković, A. Amić, Z. Marković, RADICAL SCAVENGING POTENCY OF ANIONIC SPECIES OF DIHYDROXYBENZOIC ACIDS, XXIV Conference of Serbian Crystallographic Society, June 22-24, 2017, Vršac, Serbia.
14. **J. Đorović**, S. Jeremić, E. Avdović, A. Amić, J. M. Dimitrić Marković, Antioxidant Activity of the Carboxylate Anions of the Selected Dihydroxybenzoic Acids, 4th South-East European Conference on Computational Mechanics, 03-04 July 2017, Kragujevac, Serbia, T.2.3. pp. 24.
15. S. Jeremić, Z. Dolićanin, **J. Đorović**, A. Amić, M. Stanojević Pirković, Z. Marković, Estimation of Antioxidative Capacity of Anthrarufin, 4th South-East European Conference on Computational Mechanics, 03-04 July 2017, Kragujevac, Serbia T.3.2. pp. 25.
16. V. P. Petrović, M. N. Živanović, D. Simijonović, **J. Đorović**, Z. D. Petrović, S. D. Marković, Study of the Structure, Prooxidative, and Cytotoxic Activity of Some Chelate Copper(II) Complexes, 4th South-East European Conference on Computational Mechanics, 03-04 July 2017, Kragujevac, Serbia T.3.8 pp. 26
- 17.10. Ž. Milanović, **J. Đorović**, Z. Marković, A. Amić, S. Jeremić; Inactivation of free radical species with selected triazoles, Belgrade BioInformatics Conference 2018 (BELBI2018), June 18-22, 2018, Belgrade, Serbia.
- 18.11. A. Amić, Z. Marković, J. M. Dimitrić Marković, **J. Đorović**, S. Jeremić, D. Milenković; The role of catechol moiety in free radical scavenging by simple hydroxybenzoic acids, XII Savjetovanje hemičara, tehnologa i ekologa Republike Srpske, November, 02-03.2018, Teslić, Republika Srpska.
19. Z. Marković, **J. Đorović**, D. Milenković, S. Jeremić, Lj. Joksović and A. Amić; Antiradical activity of selected triazole compounds, 14th International Conference of Fundamental and Applied Aspects of Physical Chemistry, September 24-28, 2018, Belgrade, Serbia, 121- 124.

20. **J. Đorović**, S. Jeremic, N. Manojlovic, D. Milenkovic and Z. Markovic, "Antioxidative Capacity of Evernic Acid and Its Interactions with TDP1," 2019 IEEE 19th International Conference on Bioinformatics and Bioengineering (BIBE), 2019, pp. 56-59, doi: 10.1109/BIBE.2019.00019.
21. Z. Marković, **J. Đorović**, N. Manojlović, M. Stanojević-Pirković, S. Jeremić; Antioxidative properties of usnic acid and its interaction with tyrosyl-DNK phosphodiesterase 1, 8th International Conference on Computational Bioengineering (ICCB2019), September, 4-6, 2019, Belgrade, Serbia, 76.
22. Z. Marković, D. Milenković, E. Avdović, S. Trifunović, **J. Đorović**; A combined experimental and theoretical study on vibrational spectra of 3-(1-(m-toluidino)ethylidene)-chroman-2,4-dione, 8th International Conference on Computational Bioengineering (ICCB2019), September, 4-6, 2019, Belgrade, Serbia, 74.
23. Ž. Milanović, M. Antonijević, **J. Đorović Jovanović**, E. Avdović, D. Milenković, Z. Marković, Influence of nonpolar medium on antioxidant capacity of bergaptol and xanthotoxol - kinetic DFT study, The 24th International Electronic Conference on Synthetic Organic Chemistry, 2020, 1-9, DOI: 10.3390/ecsoc-24-08100.
24. M. Antonijević, **J. Đorović Jovanović**, Ž. Milanović, E. Avdović, D. Milenković, D. Simijonović, Z. Petrović, Z. Marković, Antiradical activity of N'-(1-(2,4-dioxochroman-3-yl)ethyl)-4-hydroxybenzohydrazide-thermodynamic DFT study, 24th International Electronic Conference on Synthetic Organic Chemistry, 2020, 1-10, DOI: 10.3390/ecsoc-24-08372.
25. D. A. Milenković, D. S. Dimić, E. H. Avdović, **J. R. Đorović Jovanović**, Ž. B. Milanović, M. R. Antonijević, J. M. Dimitrić-Marković, Z. S. Marković, Neurotransmitter-coumarin derivatives as potential SARS-CoV-2 main protease inhibitors, 6th International Electronic Conference on Medicinal Chemistry, 2020, DOI: 10.3390/ECMC2020-07308.
26. **J. Đorović Jovanović**, M. Antonijević, Ž. Milanović, E. Avdović, D. Milenković, A. Amić, M. Stanojević-Pirković, Z. Marković, Potential antioxidative and inhibitory activity of parietin, 6th International Electronic Conference on Medicinal Chemistry, 2020, DOI: 10.3390/ECMC2020-07297.
27. M. Antonijević, A. Kesić, D. Milenković, **J. Đorović Jovanović**, Z.

Marković, In silico study of some tetra- and penta-coordinated gold(III) complexes as potential inhibitors of SARS-CoV-2 main protease, pp. 108, Belgrade BioInformatics Conference (BELBI 2021), 21-25 June 2021, Virtual Conference, Serbia.

28. **J. Đorović Jovanović**, D. Milenković, Ž. Milanović, and Z. Marković, ANTIRADICAL POTENCY OF CYNODONTIN TOWARD HYDROXYL RADICAL, 15th International Conference of Fundamental and Applied Aspects of Physical Chemistry, September 2021, Belgrade, Serbia.
29. D. Dimić, N. Ristivojević, **J. Đorović Jovanović**, and J. Dimitrić-Marković, DFT OPTIMIZATION AND FUKUI ANALYSIS OF SELECTED 1,4-BENZODIAZEPIN-2-ONE DRUGS, 15th International Conference of Fundamental and Applied Aspects of Physical Chemistry, September 2021, Belgrade, Serbia.
30. D. Milenković, **J. Đorović Jovanović**, E. Avdović, M. Antonijević and Ž. Milanović, ANTIRADICAL ACTIVITY OF FOLIC ACID TOWARDS $\bullet$ OH AND $\bullet$ OOH RADICALS, 15th International Conference of Fundamental and Applied Aspects of Physical Chemistry, September 2021, Belgrade, Serbia.
31. **J. Đorović Jovanović**, Z. Marković, M. Kokanović, M. Stanojević Pirković and N. Filipović, "Inhibitory potency of Valsartan/Sacubitril drug combination: molecular docking simulations," IEEE 20th International Conference on Bioinformatics and Bioengineering (BIBE), 2021.
32. S. Jeremić, M. Stanojević Pirković, **J. Đorović Jovanović** and Z. Marković "Free radical scavenger capacity of 1,2,5-trihydroxyanthraquinone and 1,2,5-trihydroxythioxanthone: theoretical comparative study," IEEE 20th International Conference on Bioinformatics and Bioengineering (BIBE), 2021.
33. **J. R. Đorović Jovanović**, D. S. Dimić, M. S. Stanojević Pirković, S. R. Jeremić, D. A. Milenković, MOLECULAR DOCKING ANALYSES OF SOME CYCLOHEXADIENE DERIVATIVES, pp. 423-426, 1st International Conference on Chemo and Bioinformatics, October 26-27, 2021. Kragujevac, Serbia.
34. S. R. Jeremić, **J. R. Đorović Jovanović**, M. S. Stanojević Pirković, Z. S. Marković, THERMODYNAMICALLY INVESTIGATIONS OF FREE RADICAL SCAVENGER POTENCY OF 1,2,4-TRIHYDROXYTHIOXANTHONE, pp. 414-417, 1st International

Conference on Chemo and Bioinformatics, October 26-27, 2021. Kragujevac, Serbia.

35. N. Ristivojević, D. Dimić, M. Došić, S. Mišić, A. Gavran, **J. Đorović Jovanović**, J. M. Dimitrić Marković, SPECTROSCOPIC AND QUANTUM-CHEMICAL INVESTIGATION OF TESTOSTERONE PROPIONATE, A COMMONLY MISUSED ANABOLIC STEROID, pp. 450-453, 1st International Conference on Chemo and Bioinformatics, October 26-27, 2021. Kragujevac, Serbia.
36. D. A. Milenković, M. N. Živanović, M. S. Dekić, M. Stanojević Pirković, **J. R. Đorović Jovanović**, CYTOTOXIC ACTIVITY AND MOLECULAR DOCKING STUDY OF 4-SUBSTITUTED FLAVYLIUM SALT, pp. 466-469, 1st International Conference on Chemo and Bioinformatics, October 26-27, 2021. Kragujevac, Serbia.
37. A. Kesić, S. Jeremić, **J. Đorović Jovanović**, Z. Marković, ANTHRARUFIN AS REVERSE TRANSCRIPTASE (RT) INHIBITOR AND POTENTIAL INHIBITOR OF HIV REPLICATION, 1th International Conference „CONFERENCE ON ADVANCES IN SCIENCE AND TECHNOLOGY“ COAST 2022 May 26-29, 2022 HERCEG NOVI, MONTENEGRO, ISBN 978-9940-611-04-0, pp. 399-406.
38. Ž. Milanović, **J. Đorović Jovanović**, D. Milenković, Z. Marković, Application of molecular modeling for predicting new structures of potential drugs; 1st Serbian International Conference on Applied Artificial Intelligence (SICAAI) Kragujevac, Serbia, May 19-20, 2022, ISBN: 978-86-81037-71-3.
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CITATION OF SCIENTIFIC PAPERS

- SCOPUS: 339 citations; h-index: 9 (Exclude self-citations)
- Google Scholar: 685 citations; h-index: 16.

BRIEF DESCRIPTION OF RESEARCH

The research in which the candidate participated can be classified into two closely related groups by topic and methodology. At first, the research work of Jelena Đorović Jovanović was focused on examining the structure and antioxidant activity of natural phenolic compounds, while her further examination include the antioxidant and prooxidative properties of synthetic phenolic compounds - Schiff's bases and their complexes with metals.

Later research work was focused on examining the antioxidant activity of natural and synthetic compounds, as well as examining their interaction with proteins.

Current research includes testing the inhibitory capacity of various compounds (antioxidants and drugs) and their interaction with proteins. Molecular docking and molecular dynamics simulations are used to study protein-ligand interactions.

