

## PERSONAL INFORMATION

Name and surname	Katarina Virijević
Date and place of birth	1992., Yerevan
Scientific title	Research Assistant
E-mail	<a href="mailto:msc.katarina.virijevic@gmail.com">msc.katarina.virijevic@gmail.com</a> <a href="mailto:katarina.virijevic@uni.kg.ac.rs">katarina.virijevic@uni.kg.ac.rs</a>
Educational-scientific / educational-artistic field	Natural sciences
University, Faculty, Organizational unit	University of Kragujevac, Faculty of Science
Research field and areas	Chemistry, Organic chemistry

## EDUCATION

### BACHELOR

Year	2011-2016
Place	Kragujevac
Institution	University of Kragujevac, Faculty of Science

### MASTER STUDIES

Year	2016-2017
Place	Kragujevac
Institution	University of Kragujevac, Faculty of Science

### DOCTORAL DISSERTATION

Year	
Place	
Institution	
Title of doctoral dissertation	

Scientific title	Research assistant
Research area	Chemistry

**PROFESSIONAL BIOGRAPHY – ELECTION IN RESEARCH OR SCIENTIFIC TITLE**

Date	Institution	Scientific title
25. 12. 2019.	University of Kragujevac, Faculty of Science	Junior research assistant
28. 10. 2022.	University of Kragujevac, Faculty of Science	Research assistant

**PROFESSIONAL BIOGRAPHY - TRAINING**

Year	Institution	Duration
2021	KMM-VIN Research Fellowship 2021, TuWien, ILSB, Austria, Vienna	One month

**ENGAGEMENT IN THE FORMATION OF SCIENTIFIC PERSONNEL**

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

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**PARTICIPATION IN INTERNATIONAL PROJECTS**

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**MEMBERSHIP IN SCIENTIFIC AND PROFESSIONAL ASSOCIATIONS**

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

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**LIST OF SCIENTIFIC PAPERS:**

Monographs, Monographic studies, Thematic anthologies	Sum
Papers published in scientific journals of international scientific importance	Sum
	7
<p><b>(M21a):</b></p> <p>1. Angelina Z. Petrović, Dušan C. Čočić, Dirk Bockfeld, Marko Živanović, Nevena Milivojević, <b><u>Katarina Virijević</u></b>, Nenad Janković, Andreas Scheurer, Milan Vraneš, Jovana V. Bogojeski</p> <p>Biological activity of bis(pyrazolylpyridine) and terpyridine Os(II) complexes in the presence of biocompatible ionic liquids</p> <p><i>Inorganic Chemistry Frontiers</i> <b>8</b> (2021) 2749-2770</p> <p><b>DOI:10.1039/D0QI01540G</b></p> <p>IF=6.569 за 2020. годину; 3/45; <b>M21a</b>; област: Chemistry, Inorganic &amp; Nuclear</p>	
<p><b>(M21):</b></p> <p>1. Snežana Jovanović-Stević, Snežana Radisavljević, Andreas Scheurer, Dušan Čočić, Biljana Šmit, Marijana Petković, Marko N. Živanović, <b><u>Katarina Virijević</u></b>, Biljana Petrović</p> <p><i>Bis(triazinyl)pyridine complexes of Pt(II) and Pd(II): studies of the nucleophilic substitution reactions, DNA/HSA interactions, molecular docking and biological activity</i></p> <p><i>Journal of Biological Inorganic Chemistry</i> <b>26</b> (2021) 625-637</p> <p><b>DOI:10.1007/s00775-021-01879-3</b></p> <p>IF=3.358 за 2020. годину; 13/45; <b>M21</b>; област: Chemistry, Inorganic &amp; Nuclear</p>	

2. Dragana Š. Šeklić, Milena M. Jovanović, **Katarina D. Virijević**, Jelena N. Grujić, Marko N. Živanović, Snežana D. Marković

*Pseudevernia furfuracea inhibits migration and invasion of colorectal carcinoma cell lines*

*Journal of Ethnopharmacology* **284** (2022) 114758

**DOI:10.1016/j.jep.2021.114758**

IF=4.360 за 2020. годину; 5/29; **M21**; област: Integrative & Complementary Medicine

**(M22):**

1. Asija Halilagić, Enisa Selimović, Jelena S. Katanić Stanković, Nikola Srećković, **Katarina Virijević**, Marko N. Živanović, Biljana Šmit, Tanja V. Soldatović

*Novel heterometallic Zn(II)-L-Cu(II) complexes: studies of the nucleophilic substitution reactions, antimicrobial, redox, and cytotoxic activity*

*Journal of Coordination Chemistry* **75** (2022) 472-492

**DOI:10.1080/00958972.2022.2048376**

IF=1.751 за 2020. годину; 26/45; **M22**; област: Chemistry, Inorganic & Nuclear

**(M23):**

1. **Katarina D. Virijević**, Petar Stanić, Jovana M. Muškinja, Jelena Katanić Stanković, Nikola Srećković, Marko Živanović, Biljana Šmit

*Synthesis and biological activity of novel zingerone-thiohydantoin hybrids*

*Journal of the Serbian Chemical Society* (2022)

**DOI:10.2298/JSC220404047V**

IF=1.240 за 2020. годину; 141/178; **M23**; област: Chemistry, Multidisciplinary

2. Milos Papic, Suzana Zivanovic, Tamara Vucicevic, Mirjana Papic, Dejan V Zdravkovic, Nevena Milivojevic, **Katarina D Virijevic**, Marko N Zivanovic, Aleksandar Mircic, Biljana Ljujic, Miodrag T Lukic, Milica L Popovic

*Pulpal expression of erythropoietin and erythropoietin receptor after direct pulp capping in rat*

*European Journal of Oral Sciences* (2022)

**DOI: [10.1111/eos.12888](https://doi.org/10.1111/eos.12888)**

IF=2.160 за 2020. годину; 72/92; **M23**; област: Dentistry, Oral Surgery & Medicine

3. Kristina Z Mihajlovic, Vera M Divac, Marina D Kostic, Marko N Zivanovic, Jelena N Grujic, **Katarina D Virijevic**

*Selenium-Functionalized Cyclic Ethers Derived from Natural Terpenic Alcohols-Biological In Vitro Profile*

*Macedonian Journal of Chemistry and Chemical Engineering*, **41** (2022), 1-10

**Proceedings of international scientific conferences**

**Sum**

10

(M34):

1. **Katarina Virijević**, Darko Asanin, Petar Stanić, Marija Živković, Biljana Šmit  
*<sup>1</sup>H NMR Monitoring of Reactions Between a Thiohydantoin Derivative and Various Palladium(II) Complexes International Congress On New Trends In Science, Engineering And Technology, 2020, St. Petersburg, Russia; Proceeding and Abstracts book, p. 15-16*
2. **Katarina Virijević**, Jelena Grujić, Mihajlo Kokanović, Nevena Milivojević, Marko N. Živanović, Nenad Filipović  
*Optimization of Parameters for Preparing Gelatine Electrospun Microfibers, 3<sup>rd</sup> Belgrade Bioinformatics Conference BelBI, 21-25 June 2021, Vinča, Serbia; Book of Abstracts, Vol. 43, p. 101*
3. Angelina Z. Caković, Dušan S. Čočić, Marko Živanović, Jelena Pavić, **Katarina Virijević**, Nenad Janković, Milan Vraneš, Jovana V. Bogojeski  
*Effect of using biocompatible ionic liquids as cosolvents on the reactions of RH(III) complexes with 5'-GMP, and CT-DNA, as well as on their cytotoxic effect 1st International Conference on advances in science and technology, Coast 2022, 26–29 Maj 2022, Herceg Novi, Montenegro; Book of Abstracts, p. 59*
4. Jelena Pavić, Marko Živanović, **Katarina Virijević**, Nikolina Kastratović, Ana Mirić, Tijana Šuštrešić, Anđela Blagojević, Irena Tanasković, Nenad Filipović  
*Examination of Gene Expression of Molecular Mechanisms of Migration, Apoptosis and Redox Status of Colorectal Carcinoma Cells 1st Serbian International Conference on Applied Artificial Intelligence (SICAAI) Kragujevac, Serbia, May 19-20, 2022*
5. Marko N Živanović, Dalibor Nikolić<sup>1</sup>, **Katarina Virijević**, Nenad Filipović  
*Use of Neural Networks in Optimization of Electrospun Derived Scaffolds 1st Serbian International Conference on Applied Artificial Intelligence (SICAAI) Kragujevac, Serbia, May 19-20, 2022*

(M33):

1. **Katarina Virijević**, Jelena Grujić, Mihajlo Kokanović, Dalibor Nikolić, Marko Živanović, Nenad Filipović  
*Electrospinning and Electrospun Nanofibrous Materials – Promising Scaffolds in*

*Tissue Engineering, Proceedings of the International Conference on Medical and Biological Engineering – CMBEBIH, 21–24 April 2021, Mostar, Bosnia and Herzegovina; IFMBE Proceedings, Vol. 84, p. 726-733*

**DOI:10.1007/978-3-030-73909-6 82**

2. Tanja Soldatović, Enisa Selimović, Nevena Milivojević, Milena Jovanović, Biljana Šmit, **Katarina Virijević**

*Novel bridged heteronuclear Pt(II)-L-Zn(II) complexes with promising antitumor activity*

*6th International Electronic Conference on Medicinal Chemistry, 1–30 November 2020, Basel, Switzerland*

**DOI:10.3390/ECMC2020-07358**

3. Milena Jovanović, **Katarina Virijević**, Jelena Grujić, Marko Živanović, Dragana Šeklić

*Extract of Edible Mushroom Laetiporus sulphurous Affects the Redox Status and Motility of Colorectal and Cervical Cancer Cell Lines.*

*The 2nd International Electronic Conference on Foods - "Future Foods and Food Technologies for a Sustainable World", Biological Life Sciences Forum, 15–30 October, 2021, Vol. 6(1), 82*

**DOI:10.3390/Foods2021-11028**

4. Asija Halilagić, Tanja Soldatović, Enisa Selimović, Nevena Milivojević, **Katarina Virijević**, Marko Živanović, Biljana Šmit

*Viability and oxidative response of human colorectal HCT-116 cancer and human lung healthy pleura MRC-5 cell lines treated with novel bridged heteronuclear Zn(II)-L-Cu(II)*

*6th International Electronic Conference on Medicinal Chemistry, 1–30 November 2020, Basel, Switzerland*

**DOI:10.3390/ECMC2020-07447**

5. **Katarina Virijević**, Jelena Grujić, Milena Jovanović, Nikolina Kastratović, Ana Mirić, Dalibor Nikolić, Marko Živanović, Nenad Filipović

*Electrospun gelatine nanofibrous scaffolds – applications in tissue engineering*

*1st International Conference on Chemo and Bioinformatics, 26–27 October 2020, Kragujevac, Serbia; Book of Proceedings, p. 251-254*

DOI: <a href="https://doi.org/10.46793/ICCBI21.251V">10.46793/ICCBI21.251V</a>	
<b>Proceedings of national scientific conferences</b>	<b>Sum</b> <b>3</b>
<b>M64:</b> <ol style="list-style-type: none"> <li>1. <b><u>K. Virijević</u></b>, P. B. Stanić, M. Vasić, B. Šmit, Antimikrobna aktivnost novosintetisanih molekulskih hibrida 2-tiohidantoina sa derivatima zingerona, Simpozijum Srpskog društva za imunologiju, molekulsku onkologiju i regenerativnu medicinu, Svetski dan imunologije, 19. april 2022., Kragujevac, Srbija, Knjiga sažetaka, str. 6</li> <li>2. <b><u>Katarina Virijević</u></b>, Petar B. Stanić, Marijana Vasić, Gorica Cvijanović, Biljana Šmit, Citotoksična aktivnost novosintetisanih molekulskih hibrida 2-tiohidantoina sa derivatima zingerona, <i>Prvi srpski kongres molekulske medicine</i>, June 16-18, 2022, Foča, Bosnia and Hercegovina, str. 21-22</li> <li>3. <b><u>K. Virijević</u></b>, P. Stanić, J. Muškinja, B. Šmit, Biological potential of new molecular hybrids of thiohydantoin and zingerone derivatives, <i>11<sup>th</sup> Conference of the Serbian Biochemical Society</i>, 22-23 September 2022, Novi Sad, Serbia, Book of abstracts, p. 132</li> </ol>	
<b>Monographs of national importance</b>	<b>Sum</b>
<b>Scientific papers in national journals</b>	<b>Sum</b>
<b>Technical solutions</b>	<b>Sum</b>
<b>Patents</b>	<b>Sum</b>

#### CITATION OF SCIENTIFIC PAPERS

Number of citations (without self-citations): 12
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#### BRIEF DESCRIPTION OF RESEARCH IN THE PREVIOUS PERIOD

In the previous period, research was focused on:
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1. Synthesis and characterization of various series of thiohydantoin derivatives. Various biological activities of the synthesized compounds were also tested.

Experimental research in the field of molecular biology and tissue engineering was carried out:

1. PCR, RTCA, Flow cytometry
2. Electrospinning technology for obtaining nanofibers
3. Examination of chemical complexes, and synthesized substances on different cancer and healthy cell lines

#### **BRIEF DESCRIPTION OF PLANNED RESEARCH IN THE NEXT PERIOD**

In the upcoming period it will be carried out:

1. Synthesis and characterization, examination of the biological activity of the synthesized compounds of new 2-thiohydantoin derivatives will be done.
2. Development of new methods in the field of molecular biology
3. Obtaining, characterization and application of nanofibers in tissue engineering