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EDUCATION

Ph.D. in Molecular Biology, December 2013, Faculty of Sciences, Masaryk University, Czech Republic. Thesis title: "ELECTROCHEMICAL ANALYSIS OF POLYAMINO ACIDS AND PROTEINS".

Diploma in Chemistry, October 2006, Faculty of Science, University of Kragujevac. Diploma work title: "Biochemical Characterization of Native and Mutant Type of Protein p53".

PROFESSIONAL POSITIONS

PhD Researcher, Department of Biology and Ecology, Faculty of Science, University of Kragujevac, Serbia, from 2011.

Resesarch Associate, Institute of Biophysics, The Czech Academy of Sciences, Czech Republic, 2005-2010.

TEACHING EXPERIENCE

Work with students – Molecular biology of eukaryotes and Structural biology, University of Kragujevac, Serbia, from 2015

Work with students – Chemistry of Nucleic Acids, Faculty of Science, Masaryk University, Czech Republic, 2007-2009.

RESEARCH EXPERIENCE

2006-2010 / Nanotechnologies for protein and gene diagnostics. Grant Agency of the Academy of Sciences of the Czech Republic. KAN400310651/researcher

2011- / Preclinical Testing of Bioactive Substances (PIBAS), Ministry of Education and Science, Republic of Serbia III41010 / researcher

SELECTED PUBLICATIONS IN INTERNATIONAL JOURNALS

1. **Marko N. Živanović**, Jelena V. Košarić, Biljana Šmit, Dragana S. Šeklić, Radoslav Z. Pavlović, Snežana D. Marković. Novel seleno-hydantoin palladium(II) complex – antimigratory, cytotoxic and prooxidative potential on human colon HCT-116 and breast MDA-MB-231 cancer cells. *Gen Physiol Biophys* 2017, 36, 187–196
2. Petar Čanović, Jovana Bogoješki, Jelena V. Košarić, Snežana D. Marković, **Marko N. Živanović**. Pt(IV), Pd(II), and Rh(III) complexes induced oxidative stress and cytotoxicity in the HCT-116 colon cancer cell line. *Turk J Biol* 2017 41: 141-147
3. Marija Djokic-Petrovic, Vladimir Cvjetkovic, Jeremy Yang, **Marko N Živanovic**, David J. Wild. PIBAS FedSPARQL: a web-based platform for integration and exploration of bioinformatics datasets. *J Biomed Semantics* 2017 DOI 10.1186/s13326-017-0151-z
4. Vladimir P. Petrović, **Marko N. Živanović**, Dušica Simijonović, Jelena Đorović, Zorica D. Petrović, Snežana D. Marković. Study of the structure, prooxidative, and cytotoxic activity of some chelate copper(II) complexes. *Chem Pap* 2017 71(11), 2075–2083
5. Cvetković DM, Živanović MN, Milutinović MG, Djukić TR, Radović MD, Cvetković AM, Filipović ND, Zdravković ND. Real-time monitoring of cytotoxic effects of electroporation on breast and colon cancer cell lines. *Bioelectrochem* 2016, 113, 85-94
6. **Živanović Marko N.**, Stojanović Aleksandra Z., Cvetković Danijela M., Milutinović Milena G., Stanković Milan S., Marković Snežana D. Effects of *Teucrium* spp.: Extracts on migratory potential and redox status of human colon SW-480 and breast MDA-MB-231 cancer cells. *Kragujevac J Sci* 2016, 38, 161-172
7. Nikodijević Danijela, Milutinović Milena, Cvetković Danijela, Stanković Milan, **Živanović Marko N.**, Marković Snežana. Effects of *Teucrium polium* L. and *Teucrium montanum* L.: Extracts on mechanisms of apoptosis in breast and colon cancer cells. *Kragujevac J Sci* 2016, 38, 147-159
8. Vladimir P. Petrović, **Marko N. Živanović**, Dušica Simijonović, Jelena Đorović, Zorica D. Petrović and Snežana D. Marković. Chelate N,O-palladium(II) complexes: synthesis, characterization and biological activity. *RSC Adv*, 2015, 5, 86274-86281
9. Vladimir P. Petrović, Dušica Simijonović, **Marko N. Živanović**, Jelena V. Košarić, Zorica D. Petrović, Svetlana Marković and Snežana D. Marković. Vanillic Mannich bases: synthesis and screening of biological activity. Mechanistic insight into the reaction with 4-chloroaniline. *RSC Adv*, 2014, 4, 24635-24644
10. Košarić JV, Cvetković DM, **Živanović MN**, Ćurčić MG, Šeklić DS, Bugarčić ZM, Marković SD. Antioxidative and antiproliferative evaluation of 2-(phenylselenomethyl)tetrahydrofuran and 2-(phenylselenomethyl)tetrahydropyran. *J BUON* 2014, 19(1): 283 – 290.
11. Jevtić VV, Radić GP, Šeklić DS, **Živanović MN**, Marković SD, Trifunović SR. PART XVI – Stereospecific ligands and their complexes. Synthesis, Characterization and in vitro Antiproliferative Activity of New Platinum(IV) Complexes With Some O,O`-Dialkyl Esters of (S,S)-Ethylenediamine-N,N`-di-2-Propanoic Acid Against Breast Cancer (MDA-MB-231) and Colon Cancer (HCT-116 and SW-480) Cell Lines. *MJCCE* 2014, 33(1): 53 – 58.
12. Vargová V, **Živanović M**, Dorčák V, Paleček E, Ostatná V. Catalysis of Hydrogen Evolution by Polylysine, Polyarginine and Polyhistidine at Mercury Electrodes. *Electroanalysis* 2013, 25(9): 2130 – 2135.
13. Šmit B, Pavlović R, Radosavljević-Mihajlović A, Došen A, Ćurčić M, Šeklić D and **Živanović M**. Synthesis, characterization and cytotoxicity of palladium(II) complex of 3-[(2-hydroxy-benzylidene)-amino]-2-thioxo-imidazolidin-4-one. *J Serb Chem Soc* 2012, 78(2): 217-227.

14. Živanović M, Aleksić M, Ostatna V, Doneux T, Paleček E. PolyLysine-catalyzed hydrogen evolution at mercury electrodes. *Electroanalysis* 2010, 22(17-18): 2064-2070.
15. Palecek E, Ostatna V, Trefulka M, Bartosik M, Cernocka H, Kurzatkowska K and Živanović M. Electrochemical Sensing of Proteins and Carbohydrates. *IEEE SENS J* 2010, 833-836.

SELECTED INTERNATIONAL CONFERENCES

1. MN Živanović, DM Cvetković, RM Prodanović, NV Popović, ND Filipović. Polymer Scaffolds for Engineering of Artificial Blood Vessels. *BioNanoMed*, Krems, Austria, 2017.
2. Marko Živanović, Danijela Cvetković, Nenad Filipović. Electrochemical Detection of microRNA-21. *SEECCM*, Kragujevac, Serbia, 2017.
3. Marko Živanović, Danijela Cvetković, Nenad Filipović. Mathematical modeling and experimental procedures for tissue engineering of blood vessels by electrospinning. *ESAO*, Wien, Austria, 2017.
4. Marko Živanović, Danijela Cvetković, Nenad Filipović. Optimization of Parameters for Electrochemical Detection: Computer Simulation and Experimental Study. *Fabulous*, Bucharest, Romania, 2017.
5. Marko Živanović, Danijela Cvetković, Nenad Filipović. µSense Cancer Procedure for Detection of microRNAs as Cancer Biomarkers – From Science to Patients. *Fabulous*, Belgrade, Serbia, 2016.
6. Danijela Cvetkovic, Danijela Nikodijevic, Marko N Živanovic, Milena Curcic, Snezana Markovic, Jovana Jovankic, Filip Vukajlovic. Molecular mechanisms of redox status and antitumor activity of extracts of invasive plant species (*Robinia pseudoacacia* and *Amorpha fruticosa*) in MRC-5 and MDA-MB-231 cell lines. Sixth Conference of the Serbian Biochemical Society “Biochemistry and Interdisciplinarity: Transcending the Limits of Field”, Belgrade, Republic of Serbia, 2016.
7. Tijana Đukić, Danijela Cvetković, Miloš Radović, Marko Živanović, Nenad Filipović. Numerical Modeling of Behavior of Cancer Cells After Electroporation. *BIBE*, Belgrade, Serbia, 2015.
8. Dušica Simijonović, Zorica D. Petrović, Vladimir P. Petrović, Marko N. Živanović, Snežana D. Marković. Sinteza i biološka aktivnost Pd(II)-kompleksa salicilaldehidno-anilinskih Šifovih baza. 52. Savetovanje srpskog hemijskog društva, Novi Sad, Republic of Serbia, 2015.
9. Dragana Šeklić, Verica Jevtić, Srećko Trifunović, Marko N Živanović, Snezana Marković. Cytotoxic, proapoptotic prooxidant and antimigratory effects of two newly synthesized Pt(IV) complex and their respective ligands on colon cancer cell lines. REDOX MEDICINE: Reactive species signaling, analytical methods, phytopharmacy, molecular mechanisms of disease, Belgrade, Republic of Serbia, 2015.
10. Aleksandra Stojanović, Marko N Živanović, Snezana Marković. Effects of Extract of *Teucrium* spp. on Viability, Migration Potential and Redox Status of Colon Cancer (SW-480) and Breast Cancer (MDA-MB-231) Cell Lines. REDOX MEDICINE: Reactive species signaling, analytical methods, phytopharmacy, molecular mechanisms of disease, Belgrade, Republic of Serbia, 2015.

11. B Arsić, M Đokić, V Cvjetković, P Spalević, **M Živanović**, M Mladenović. Integration of bioactive substances data for preclinical testing with cheminformatics and bioinformatics resources. *ERK IEEE*, Slovenia, Portoroz, 2014.
12. **Živanović MN**. Electrochemical Analysis of Polyamino Acids and Proteins. *Serbian Biochemical Society Third Conference „Roots and Branches of Biochemistry“, Belgrade, Republic of Serbia*, 2013.
13. Dragana S. Šeklić, Milan S. Stanković, Marina D. Topuzović, Milena G. Ćurčić, **Marko N. Živanović**, Danijela Cvetković, Snežana D. Marković. Proksidativni i antimigratori efekti ekstrakata medicinski značajnih gljiva u tretmanu ćelijskih linija humanog kolon kancera. Život sa slobodnim radikalima: Hemija, Biologija, Medicina, Niš, Republic of Serbia, 2013.
14. **Marko N Živanović**, Jelena Košarić, Dragana Šeklić, Danijela Cvetković, Milena Ćurčić, Slobodan Sukdolak, Snežana Marković. Citotoksični i antioksidativni/proksidativni efekti derivata kumarina na ćelijskoj liniji humanog kolon kanc cera HCT-116. Život sa slobodnim radikalima: Hemija, Biologija, Medicina, Niš, Republic of Serbia, 2013.
15. Milena Ćurčić, Milan Stanković, Danijela Cvetković, **Marko N Živanović**, Snežana Marković. Proksidacioni efekat i citotoksičnost ekstrakata bilje *Ligustrum vulgare L.* na ćelije karcinoma kolona. Život sa slobodnim radikalima: Hemija, Biologija, Medicina, Niš, Republic of Serbia, 2013.
16. **Živanović MN**. Electrochemical Analysis of Polyamino Acids and Proteins. *Serbian Biochemical Society Third Conference „Roots and Branches of Biochemistry“, Belgrade, Republic of Serbia*, 2013.
17. Vargová V, **Živanović MN**, Dorčák V, Ostatná V, Paleček E. Electrocatalysis in Proteins and Polyamino Acids. XXXIII Moderní elektrochemické metody. Jetřichovice u Děčína, Česká republika, 2013.
18. Vargova V, **Zivanovic M**, Ostatna V, Palecek E. Electroanalysis of polyamino acids on mercury electrode. XII Pracovní setkání fyzikálních chemiků a elektrochemiků, Brno, Czech Republic, 2012.
19. **Zivanovic M**, Ostatna V, Palecek E. Catalytic hydrogen evolution by polyaminoacids using mercury electrode. *J. Biochem. Techn.* – Special Issue, 2010, 2(5): S98-S99.
20. Paleček E, **Živanović M**, Ostatna V, Trefulka M. Electrochemistry of DNA and nonconjugated proteins. New trends in protein analysis. Second Regional Symposium on Electrochemistry: South-East Europe, Belgrade, Republic of Serbia, 2010, KN-13.
21. **Živanović M**, Aleksić M, Ostatna V, Paleček E. Catalytic hydrogen evolution of polyamino acids on mercury electrode. Second Regional Symposium on Electrochemistry: South-East Europe, Belgrade, Republic of Serbia, 2010.
22. Aleksić M, **Zivanovic M**, Ostatna V, Doneux T, Palecek E. Polylysine-Catalyzed Hydrogen Evolution at Mercury Electrodes. Second Regional Symposium on Electrochemistry: South-East Europe, Belgrade, Republic of Serbia, 2010.
23. Paleček E, **Živanović M**, Ostatna V, Trefulka M, Dorcak V, Bartosik M. Electrochemistry of Nucleic Acids and Non-Conjugated Proteins. International Conference on Electrochemical Sensors, Matrafüred, Hungary, 2008. Printed in *Electroanalysis - Special Issue: International Conference on Electrochemical Sensors*, Mátrafüred, Hungary, 21(17-18), 2009.
24. **Živanović M**, Ostatna V, Paleček E. Molecular behaviour and bioelectrochemistry of histone proteins. Satellite Symposium to ESEAC, Brno, Czech Republic, 2008.
25. Dusan Krstic, **Zivanovic M**, Ostatna V, Cernocka H, Jovin TM, Palecek E. Protein aggregation in Parkinson's disease. Interfacial properties of α -synucleine at carbonelectrodes. VIII. Pracovní setkání fyzikálních chemiků a elektrochemiků, Brno, Česká republika, 2008.

26. **Zivanovic M**, Ticha O, Brazdova M, Dvorak J, Lexa M, Fojta M, Palecek E. DNA triplex study in vitro and in vivo. XI. Pracovní setkání biochemiků a molekulárních biologů, Brno, Česká Republika, 2007.
27. Ostatná V, Paleček E and **Živanović M**. Electroanalysis of Native, Denatured and Reduced BSA. Enhancement of Peak H by Guanidium Chloride. XXVII Moderní elektrochemické metody. Jetřichovice u Děčína, Česká republika, 2007.
28. Dvorak J, Brazdova M, Walter K, **Zivanovic M**, Cincarova L, Deppert W, Palecek E. Počítacová analýza genomových sekvencí – přirozených vazebných míst onkogenních proteinů p53R273H a p53R273C. X. Pracovní setkání biochemiků a molekulárních biologů, Brno, Česká Republika, 2006. S13
29. Brazdova M, Nemcova K, Pivonkova H, Walter K, Warnecka K, **Zivanovic M**, Palecek E, Depper W and Fojta M. Binding of mutant and wild type p53 proteins to supercoiled DNA. CELLS VI (BIOLOGICAL DAYS XVIII), Ceske Budejovice, Czech Republic, 2005. S4. Printed in Journal of Applied Biomedicine, 3 (Suppl 1).

LABORATORY EXPERTISE

Preclinical testing: Investigation of influence of novel drugs on cancer cells.

Bioelectrochemistry: Analyses of proteins, polyamino acids, nucleic acids and their interaction.

Tissue engineering: Artificial blood vessel production.

SKILLS & INTERESTS

Language: English–fluent, Czech–fluent, Romanian–intermediate reading and listening knowledge, Serbian–native language

Hobbies: Sports, Hiking.