# CURRICULUM VITAE

## Dušica Simijonović

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| *Family name (Surname):* | Simijonović |
| *First name:* | Dušica |
| *Date of birth:* | March 18, 1982 |
| *Country and place of birth:* | Serbia, Jagodina |
| *Nationality:* | Serbian |
| *Present citizenship:* | Serbia |
| *Home address:* | 35262 Jagodina, Ivkovački Prnjavor<br>Serbia<br>*Phone: +(381) 69 55 44 274* |
| *Work address:* | Department of Chemistry<br>Faculty of Science<br>University of Kragujevac<br>R. Domanovića 12, P.O.Box 60<br>34000 Kragujevac, Serbia<br>*Phone: +(381) 34 336 223, Ext358*<br>*Fax: +(381) 34 335 040* |

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***EDUCATION***

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| *Primary School:* | Kolare, Serbia<br>1989 – 1997 |
| *Secondary School:* | Jagodina, Serbia<br>1997 – 2001 |
| *MSc in Chemistry:* | Department of Chemistry<br>Faculty of Science<br>University of Kragujevac<br>Kragujevac, Serbia<br>2001 - 2007 |
| *PhD in Chemistry:*<br>*(Supervisor: Professor Zorica D. Petrović)* | Department of Chemistry<br>Faculty of Science<br>University of Kragujevac<br>Kragujevac, Serbia<br>2007-2014 |
| *PhD thesis title:* | Ethanolamines derivatives as ionic liquids and precursors of biologically and catalytically active Pd(II)-complexes |
| *Professional Societies:* | Serbian Chemical Society |
| *List of significant publications:* | **20** Publications<br>(See List of Scientific Publications) |

***EMPLOYMENT:***

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| *Research Assistant:*<br>*(Supervisor: Professor Zorica D. Petrović)* | Department of Chemistry<br>Faculty of Science<br>University of Kragujevac<br>Kragujevac, Serbia<br>01. October 2007 –present |

***WORK/RESEARCH EXPERIENCE***

- Phosphine-free Heck reaction: structural characterization of obtained products, and mechanistic study applying different experimental techniques.
- Ionic liquids synthesis and characterization.
- Mannich reaction: structural characterization of obtained products, applying different experimental techniques.
- Palladium(II) and platinum(II) complexes as artificial metallopeptidases - experimental mechanistic studies of peptide hydrolysis.
- Radical scavenging activity of compounds (DPPH test and inhibition of LOX).

***TECHICAL/RESEARCH SKILLS***

Good background in organic and bioorganic chemistry, organic synthesis, NMR and IR spectroscopy, UV-Vis spectrophotometry, chromatography techniques.

***AWARDS***

Diploma “Vuk Karadžić” for all excellent marks throughout the primary school.

***LANGUAGES***

*(a) Mother tongue:* Serbian
*(b) Other languages:* English, Russian - understanding, speaking and writing.

***COMPUTER SKILLS***

Skilled in the use of:

1. The Internet in search and use of pertinent information;
2. Microsoft Office (Word, Excel, PowerPoint);
3. ChemOffice;
4. Photoshop.

# LIST OF SCIENTIFIC PUBLICATIONS OF DUŠICA SIMIJONOVIĆ

1. Petrović Z.D., Marković S., **Simijonović D.**, Petrović V., Mechanistic insight into preactivation of a modern palladium catalyst precursor in phosphine-free Heck reactions, *Monatsh. Chem.*, (2009) 140: 371-374.

2. Petrovic Z.D., Hadjipavlou-Litina D., Pontiki E., **Simijonovic D.**, Petrovic V.P., Diethanolamine Pd(II) complexes in bioorganic modeling as model systems of metallopeptidases and soybean lipoxygenase inhibitors, *Bioorg. Chem.*, (2009) 37: 162–166.

3. Petrović Z.D., **Simijonović D.**, Petrović V.P., Marković S., Diethanolamine and *N*,*N*-diethylethanolamine ionic liquids as precatalyst-precursors and reaction media in green Heck reaction protocol *J. Mol. Cat. A.* (2010) 327: 45-50.

4. Petrovic Z.D, Petrovic V.P., **Simijonovic D.**, Markovic S., Mechanistic pathways for oxidative addition of aryl iodides to the low-ligated diethanolamine palladium(0) complex in phosphine-free Heck reactions, *J. Organomet. Chem*, (2009) 694: 3852-3858.

5. Petrović Z.D., Marković S., Petrović V.P., **Simijonović D.**, Triethanolammonium acetate as a multifunctional ionic liquid in the palladium-catalyzed green Heck reaction, *J. Mol. Modl.* (2012) 18:433–440.

6. Petrović Z.D., Petrović V.P., **Simijonović D.**, Marković S., Insight into hydrolytic reaction of *N*-acetylated L-histidylglycine dipeptide with novel mechlorethamine platinum(II) complex. NMR and DFT study of the hydrolytic reaction, *Dalton Trans.* (2011) 40: 9284–9288.

7. Balaban A.T., Gutman I., Marković S., **Simijonović D.**, Đurdević J.: Local Aromaticity in Benzoand Benzocyclobutadieno-Annelated Phenanthrenes, *Polycycl. Aromat. Comp.*, (2011) 31:339–349.

8. Petrović Z.D., Petrović V.P., **Simijonović D.**, Marković S. Stereoselective homogeneous catalytic arylation of methyl methacrylate: Experimental and computational study, *J. Mol. Cat. A.* (2012) 356: 144–151.

9. Petrović Z.D., Čomić Lj., Stevanović O., **Simijonović D.**, Petrović V.P., Antimicrobial activity of the ionic liquids triethanolamine acetate and diethanolamine chloride, and their corresponding Pd(II) complexes, *J. Mol. Liq.* (2012) 170: 61–65.

10. Perić T., Jakovljević V.Lj., Zivković V., Krkeljić J., Petrović Z.D., **Simijonović D.**, Novokmet S., Djurić D.M., Janković S.M., Toxic Effects of Palladium Compounds on the Isolated Rat Heart, *Medicinal. Chem.,* (2012**)** 8: 9-13.

11. Radojević I., Petrović Z.D., Čomić Lj., **Simijonović D.**, Petrović V.P., Biological evaluation of mechlorethamine-Pt(II) complex, part II: Antimicrobial screening and LOX study of the complex and its ligand, *Medicinal. Chem.,* (2012**)**, 8(5): 947-952.

12. Balaban A.T., Gutman I., Marković S., **Simijonović D.**, Local aromaticity in benzo- and benzocyclobutadieno-annelated anthracenes, *Monatsh. Chem.*, (2011) 142: 797-800.

13. **Simijonović D.**, Petrović Z.D., Petrović V.P., Some physico-chemical properties of ethanolamine ionic liquids: Behavior indifferent solvents, *J. Mol. Liq.* (2013) 179: 98–103.

14. Petrović V.P., **Simijonović D.**, Petrović Z.D., Use of diethanolammonium–tetrachloridopalladate(II) complex in bioorganic modelling as artificial metallopeptidase in the reaction with *N*-acetylated *L*-methionylglycine dipeptide. NMR and DFT study of the hydrolytic reaction, *J. Mol. Struct*. (2014) 1060: 38–41.

15. Petrović V.P., **Simijonović D.**, Živanović M.N., Košarić J.V., Petrović Z.D., Marković S., Marković S.D. Vanillic Mannich bases: synthesis and screening of biological activity. Mechanistic insight into the reaction with 4-chloroaniline, *RSC Adv.*, (2014) 4: 24635–24644.

16. Petrović Z.D., Đorović J., **Simijonović D**., Petrović V.P., Marković Z., Experimental and theoretical study of antioxidative properties of some salicylaldehyde and vanillic Schiff bases, *RSC Adv.,* (2015) 5: 24094–24100.

17. Petrović V.P., **Simijonović D.,** Petrović Z.D., Marković S., Formation of a vanillic Mannich base – theoretical study , *Chem. Pap*., (2015) 69: 1244–1252.

18. Petrović V.P., **Simijonović D.**, Novaković S.B., Bogdanović G.A., Marković S., Petrović Z.D., Structural characterisation of some vanillic Mannich bases: Experimental and theoretical study, *J. Mol. Struc*., (2015) 1098: 34-40.

19. Petrović V.P., Živanović M.N., **Simijonović D.**, Đorović J., Petrović Z.D., Marković S.D. Chelate *N,O*-palladium(II) complexes: synthesis, characterization and biological activity, *RSC Adv.*, (2015) 5: 86274-86281.

20. Marković Z., Đorović J., Petrović Z.D., Petrović V.P., **Simijonović D**., Investigation of the antioxidant and radical scavenging activities of some phenolic Schiff bases with different free radicals, *J. Mol. Modl.*, DOI 10.1007/s00894-015-2840-9, (2015) 21: 293.