



CURRICULUM VITAE OF SVETLANA MARKOVIĆ

First name: Svetlana
Family name: Marković
Maiden name: Petrović
Date of birth: April 18, 1959
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Education

1966 - 1978: Primary and secondary schooling in Kruševac, Serbia

1978 - 1983: Study of chemistry at the Faculty of Science, University of Kragujevac, Serbia

1983: B. Sc. degree in chemistry

1988: M. Sc. degree in chemistry (Faculty of Science, University of Kragujevac
Supervisor - Prof. Dr. Ivan Gutman)

1992: Ph. D. degree in chemistry (Faculty of Science, University of Kragujevac
Supervisor - Prof. Dr. Ivan Gutman)

Field of research: Mathematical and computational chemistry

Post-doctoral studies:

1999 – 2001: Technikon Pretoria, Department of Chemistry and Physics

Supervisor: Dr. Johan P. Engelbrecht

Field of research: Chemistry under supercritical conditions

Lecturing: Physical Chemistry

Employment

1986 - 1993: Teaching assistant at the Faculty of Science, Kragujevac
1993 – 2003: Docent at the Faculty of Science, Kragujevac
2003 – 2009: Associate professor at the Faculty of Science, Kragujevac
2009 – present: Full professor at the Faculty of Science, Kragujevac

Lecturing: Computers in Chemistry
Programming in Chemistry
Physical Chemistry
Molecular modeling
Methodology of scientific work in Chemistry

List of scientific papers

99. Jelena Tošović, **Svetlana Marković**
Reactivity of chlorogenic acid towards hydroxyl and methyl peroxy radicals relative to trolox in nonpolar media
Theor. Chem. Acc. **137** (2018) 76. DOI: 10.1007/s00214-018-2251-y.
ISSN: 1432-881X, **M22**, IF(2016)=**1,890**
98. Adrijana Burmudžija, **Svetlana Marković**, Jovana Muškinja, Anka Pejović, Jelena Tošović
Influence of counterion on the methylation of some ambident nucleophiles: DFT study
React. Kinet. Cat. **123** (2018) 201-214. DOI: 10.1007/s11144-017-1263-2.
ISSN: 1878-5190, **M23**, IF(2016)=**1,264**
97. Izudin Redžepović, **Svetlana Marković**, Jelena Tošović
ANTIOXIDATIVE ACTIVITY OF CAFFEIC ACID – MECHANISTIC DFT STUDY
Kragujevac J. Sci. **39** (2017) 109-122. DOI: 10.5937/KgJSci1739109R.
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96. Jelena Tošović, **Svetlana Marković**, Jasmina M. Dimitrić Marković, Miloš Mojović, Dejan Milenković
Antioxidative mechanisms in chlorogenic acid
Food Chem. **237** (2017) 390-398. DOI:
<http://dx.doi.org/10.1016/j.foodchem.2017.05.080>.
ISSN: 0308-8146, **M21a**, IF(2016)=**4,529**
95. Jelena Tošović, **Svetlana Marković**
Structural and Antioxidative Features of Chlorogenic Acid
Croat. Chem. Acta **89(4)** 535-541 (2016). DOI: <http://dx.doi.org/10.5562/cca3026>.
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94. Jelena Tošović, **Svetlana Marković**, Dejan Milenković, Zoran Marković
Solvation Enthalpies and Gibbs Energies of the Proton and Electron – Influence of Solvation Models
J. Serb. Soc. Comp. Mech. **10(2)** (2016) 66-76. UDC: 539.125.4:66.093.1, 539.124:66.093.1
93. Jelena Tošović, **Svetlana Marković**
Reproduction and interpretation of the UV-vis spectra of some flavonoids
Chem. Pap. **71** (2017) 543-552. DOI: 10.1007/s11696-016-0002-x.
ISSN: 0366-6352, **M22**, IF(2015)=**1,326**
92. Ana Amić, Bono Lučić, Višnja Stepanić, Zoran Marković, **Svetlana Marković**, Jasmina M. Dimitrić Marković, Dragan Amić
Free radical scavenging potency of quercetin catecholic colonic metabolites: Thermodynamics of $2H^+/2e^-$ processes
Food Chem. **218** (2017) 144-151. DOI: 10.1016/j.foodchem.2016.09.018.
ISSN: 0308-8146, **M21a**, IF(2016)=**4,529**
91. **Svetlana Marković**, Jelena Tošović
Comparative study of the antioxidative activities of caffeoylquinic and caffeic acids
Food Chem. **210** (2016) 585-592. DOI: 10.1016/j.foodchem.2016.05.019.
90. **Svetlana Marković**, Jelena Tošović, Jasmina M. Dimitrić Marković
Synergic application of spectroscopic and theoretical methods to the chlorogenic acid structure elucidation
Spectrochim. Acta A **164** (2016) 67-75. DOI:
<http://dx.doi.org/10.1016/j.saa.2016.03.044>.
89. Zoran Marković, Jelena Tošović, Dejan Milenković, **Svetlana Marković**
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Comput. Theor. Chem. **1077** (2016) 11-17. DOI: 10.1016/j.comptc.2015.09.007.
88. **Svetlana Marković**, Jelena Tošović
Application of Time-Dependent Density Functional and Natural Bond Orbital Theories to the UV-vis Absorption Spectra of Some Phenolic Compounds
J. Phys. Chem. A **119** (2015) 9352-9362. DOI: 10.1021/acs.jpca.5b05129.
87. Vladimir P. Petrović, Dušica Simijonović, Slađana B. Novaković, Goran A. Bogdanović, **Svetlana Marković**, Zorica D. Petrović
Structural characterisation of some vanillic Mannich bases: Experimental and theoretical study
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86. Vladimir P. Petrović, Dušica Simijonović, Zorica D. Petrović, **Svetlana Marković**

Formation of a vanillic Mannich base – theoretical study
Chem. Pap. **69(9)** (2015) 1244-1252. DOI: 10.1515/chempap-2015-0123.

85. **Svetlana Marković**, Ljubiša Mitrović, Jelena Đurđević, Jelena Tošović, Zorica Petrović

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Comput. Theor. Chem. **1066** (2015) 14-19. DOI: 10.1016/j.comptc.2015.05.005.

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Revisiting the Kolbe–Schmitt reaction of sodium 2-naphthoxide
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Double catalytic effect of $(PhNH_3)_2CuCl_4$ in a novel, highly efficient synthesis of 2-oxo and thioxo-1,2,3,4-tetrahydropyrimidines
J. Serb. Chem. Soc. **80(5)** (2015) 595-604. DOI: 10.2298/JSC141028011J.

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81. Igor Đurović, **Svetlana Marković**, Zoran Marković

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Carboxylation of sodium 2-naphthoxide. Reinvestigation of the mechanism by means of a hybrid meta density functional theory method
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80. Vladimir P. Petrović, Dušica Simijonović, Marko N. Živanović, Jelena V. Košarić, Zorica D. Petrović, **Svetlana Marković**, Snežana D. Marković

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77. Violeta Marković, Milan D. Joksović, **Svetlana Marković**, Ivan Jakovljević

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Examination of the chemical behavior of the quercetin radical cation towards some bases

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73. Violeta Marković, **Svetlana Marković**, Ana Janićijević, Marko V. Rodić, Vukadin M. Leovac, Nina Todorović, Snežana Trifunović, Milan D. Joksović

Mechanistic investigation and DFT calculation of the new reaction between S-methylisothiosemicarbazide and methyl acetoacetate

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Mechanistic insight into the formation of cinnamates in phosphine-free Heck reaction

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69. Ivan Gutman, Jelena Tošović, Slavko Radenković, **Svetlana Marković**

On atom-bond connectivity index and its chemical applicability

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68. Zorica D. Petrović, Vladimir P. Petrović, Dušica Simijonović, **Svetlana Marković**
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67. Slavko Radenković, **Svetlana Marković**, Ratko Kuč, Nevena Stanković
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Jelena Đurđević
Local aromaticity in benzo- and benzocyclobutadieno-annelated phenanthrenes
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65. Zorica D. Petrović, Vladimir P. Petrović, Dušica Simijonović, **Svetlana Marković**
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mechlorethamine platinum(II) complex. NMR and DFT study of the hydrolytic reaction*
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Milenković
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63. Alexandru T. Balaban, Ivan Gutman, **Svetlana Marković**, Dušica Simijonović
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62. **Svetlana Marković**, Slavko Radenković, Zoran Marković, Ivan Gutman
DFT Study on Singlet Diradical Character of Zethrenes
Russ. J. Phys. Chem. **85(13)** (2011) 2368-2372.
61. Zorica D. Petrović, **Svetlana Marković**, Vladimir P. Petrović, Dušica Simijonović
*Triethanolammonium acetate as multifunctional ionic liquid in palladium-catalyzed
green Heck reaction*
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60. Vladimir P. Petrović, **Svetlana Marković**, Zorica D. Petrović
A new aspect of Heck catalyst formation
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58. **Svetlana Marković**, Milan D. Joksović, Petra Bombicz, Vukadin M. Leovac, Violeta
Marković, Ljubinka Joksović

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57. **Svetlana Marković**, Jelena Đurđević, Svetlana Jeremić, Ivan Gutman

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56. Ivan Gutman, **Svetlana Marković**, Svetlana Jeremić

A case of breakdown of the Kekulé-structure model

Polycyc. Arom. Comp., **30(4)** (2010) 240-246.

55. Zorica D. Petrović, Dušica Simijonović, Vladimir P. Petrović, **Svetlana Marković**

Diethanolamine and N,N-diethylethanolamine ionic liquids as precatalyst-precursors and reaction media in green Heck reaction protocol

J. Mol. Cat. A, **327(1-2)** (2010) 45-50.

54. Sonja Stanković, **Svetlana Marković**, Ivan Gutman, Silva Sretenović

Hydrogen-mediated Stone-Wales isomerization of dicyclopenta[de,mn]anthracene

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53. Zorica D. Petrović, Vladimir P. Petrović, Dušica Simijonović, **Svetlana Marković**

Mechanistic Pathways for Oxidative Addition of Aryl Iodides to the Low-Ligated Diethanolamine Palladium(0) Complex in Phosphine-Free Heck Reactions

J. Organomet. Chem. **694(24)** (2009) 3852-3858.

52. Jelena Đurđević, Slavko Radenković, Ivan Gutman, **Svetlana Marković**

Testing the PCP-rule

Monatsh. Chem. **140(11)** (2009) 1305-1309.

51. **Svetlana Marković**, Ana Despotović, Dejan Jovanović, Igor Đurović

Enthalpy of Formation of Acyclic Saturated Ketones

Russ. J. Phys. Chem. **83(9)** (2009) 1430-1435.

50. Sonja Stanković, **Svetlana Marković**, Slavko Radenković, Ivan Gutman

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49. **S. Marković**, Z. D. Petrović, V. Petrović

DFT study on the preactivation reaction of a palladium catalyst precursor in phosphine-free Heck reactions

Monatsh. Chem. **140(2)** (2009) 171-175.

48. **S. Marković**, S. Stanković, S. Radenković, I. Gutman

Thermal isomerization in cyclopenta[fg]aceanthrylene

Monatsh. Chem. **140**(2) (2009) 153-156.

47. **S. Marković**, S. Stanković, S. Radenković, I. Gutman
Electronic Structure Study of Thermal Intraconversions of Some Dicyclopenta-Fused Polycyclic Aromatic Compounds

J. Chem. Inf. Model. **48** (2008) 1984-1989.

46. V. M. Leovac, **S. Marković**, V. Divjaković, K. M. Szécsényi, M. D. Joksović, I. Leban

Structural and DFT studies on molecular structure of Ni(II) chloride complex with pyridoxal semicarbazone (PLSC). Unusual coordination mode of PLSC

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45. Z. D. Petrović, **S. Marković**, D. Simijonović, V. Petrović

Mechanistic Insight into Preactivation of a Modern Palladium Catalyst Precursor in Phosphine-free Heck Reactions

Monatsh. Chem. **140**(4) (2009) 371-374.

44. **S. Marković**, I. Đurović, Z. Marković

Formation of Sodium 6-Hydroxy-2-Naphthoate in the Kolbe-Schmitt Reaction

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43. Z. Marković, **S. Marković**

Last Step of the Para Route of the Kolbe-Schmitt Reaction

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30. **S. Marković**
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24. **S. Marković**, I. Gutman, J. Šuković

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