

CURRICULUM VITAE

Vladimir Petrović



Family name (Surname):

Petrović

First name:

Vladimir

Date of birth:

January 12, 1984

Present citizenship:

Serbia

Work address:

Charles University in Prague

Faculty of Science

Department of Organic Chemistry

Hlavova 2030/8 128 43 Prague 2

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EDUCATION

MSc in Chemistry:

Department of Chemistry

Faculty of Science

University of Kragujevac

Kragujevac, Serbia

2003 - 2007

PhD in Chemistry:

Department of Chemistry

Faculty of Science

University of Kragujevac

Kragujevac, Serbia

2007-2013

List of significant publications:

21 Publications

(See List of Scientific Publications)

EMPLOYMENT:

Research Assistant:

(Supervisor: Professor Zorica D. Petrović)

Department of Chemistry

Faculty of Science

University of Kragujevac

Kragujevac, Serbia

01. October 2007 – 1. April 2013.

Research Associate:

(Supervisor: Professor Zorica D. Petrović)

Department of Chemistry

Faculty of Science

University of Kragujevac

Kragujevac, Serbia

01. October 2007 – 1. April 2013.

WORK/RESEARCH EXPERIENCE

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

TECHICAL/RESEARCH SKILLS

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

AWARDS

Award from the Serbian Chemical Society for extraordinary success during the studies of chemistry.

LANGUAGES

(a) *Mother tongue:* Serbian

(b) *Other languages:*

Understanding		Speaking				Writing	
Listening	Reading	Spoken interaction		Spoken production			
1. English	1. English	1.	English	1.	English	1.	English
2. Russian	2. Russian	2.	Russian	2.			

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, CorelDraw – graphics related software's.

LIST OF SCIENTIFIC PUBLICATIONS OF VLADIMIR PETROVIĆ

1. 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
Journal of Organometallic Chemistry, **694** (2009) 3852-3858
2. PetrovićZ.D., SimijonovićD., **PetrovićV.P.**, Marković S.,
Diethanolamine and *N,N*-diethylethanolamine ionic liquids as precatalyst-precursors and reaction media in green Heck reaction protocol
Journal of Molecular Catalysis. A: Chemical, **327** (2010) 45-50
3. 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 Transactions, **40** (2011) 9284-9288
4. Petrović Z. D., Marković S., **Petrović V.P.**, Simijonović D.
Triethanolammonium acetate as a multifunctional ionic liquid in the palladium-catalyzed green Heck reaction
Journal of Molecular Modeling, **18** (2012) 433–440
5. Petrović Z.D., Marković S., Simijonović D., **Petrović V.**
Mechanistic insight into preactivation of a modern palladium catalyst precursor in phosphine-free Heck reactions
Monatshefte für Chemie, **140** (2009) 371–374
6. Marković S., Petrović Z. D, **Petrović V.**
DFT study on the preactivation reaction of a palladium catalyst precursor in phosphine free Heck reaction
Monatshefte für Chemie, **140** (2009) 171–175
7. Petrovic Z.D., Hadjipavlou-Litina D., Pontiki E., Simijonovic D., **Petrovic V.P.**
DiethanolaminePd(II) complexes in bioorganic modeling as model systems of metallopeptidases and soybean lipoxygenase inhibitors
Bioorganic Chemistry, **37** (2009) 162-166
8. **Petrović V.P.**, Petrović Z.D., Marković S.
A new aspect of Heck catalyst formation

- Monatshefte für Chemie*, **142** (2011) 141–144.
9. Petrović Z. D., **Petrović V. P.**, Simijonović D., Marković S.
Stereoselective homogeneous catalytic arylation of methyl methacrylate: Experimental and computational study
Journal of Molecular Catalysis. A: Chemical, **356** (2012) 144-151.
10. 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 Chemistry, **8(5)** (2012) 947-952.
11. **Petrović V.P.**, Marković S., Petrović Z.D.
Mechanistic insight into the formation of cinnamates in phosphine-free Heck reactions
Monatshefte für Chemie, **143** (2012) 1497–1502.
12. Petrović Z.D., Hadjipavlou-Litina D., **Petrović V.P.**
New Pd(II)-mechlorethamine complex: Synthesis, NMR study of hydrolytic activity and in vitro evaluation of antiradical property of new complex and its alkylating precursor
Journal of Molecular Liquids, **144** (2009) 55-58
13. 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
Journal of Molecular Liquids, **170** (2012) 61-65
14. Simijonović D., Petrović Z.D., **Petrović V.P.**
Some physico-chemical properties of ethanolamine ionic liquids: Behavior in different solvents.
Journal of Molecular Liquids, **179** (2013) 98-103
15. Ivan Gutman, Svetlana Jeremic, **Vladimir Petrovic**
Extending the phenyl-cyclopentadienyl rule
Indian Journal of Chemistry. Section A **48A** (2009) 658-662
16. Stojković D.L.J., Jevtić V., Radić G.P., Đačić D.S., Čurčić M.G., Marković S.D., Đinović V.M., **Petrović V.P.**, Trifunović S.R.
Stereospecific ligands and their complexes. Part XII. Synthesis, characterization and in vitro antiproliferative activity of platinum(IV) complexes with some *O,O'*-dialkyl esters

of (*S,S*)-ethylenediamine-*N,N'*-di-2-propanoic acid against colon cancer (HCT-116) and breast cancer (MDA-MB-231) cell lines

Journal of Molecular Structure, **1062** (2014) 21–28

17. **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

Journal of Molecular Structure, **1060** (2014) 38–41

18. **Petrović V.P.**, Simijonović D., Živanović M.N., Košarić J.V., Petrović Z.D. Marković S., Snežana M.D.

Vanillic Mannich bases: synthesis and screening of biological activity. Mechanistic insight into the reaction with 4-chloroaniline

RSC Advances, **4** (2014) 24635-24644

19. 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 Advances, **5** (2015) 24094-24100

20. **Petrović V.P.**, Simijonović D., Petrović Z.D., Marković S.

Formation of a vanillic Mannich base – theoretical study

Chemical Papers, **69** (9) (2015) 1244–1252

21. **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

Journal of Molecular Structure, **1098** (2015) 34-40