

Prof. dr Biljana V. Petrović, redovni profesor
Curriculum Vitae

<i>Prezime:</i>	Petrović
<i>Ime:</i>	Biljana
<i>Ime oca:</i>	Vitomir
<i>Datum rođenja</i>	04.10.1970.
<i>Mesto rođenja:</i>	Zaječar, Srbija
<i>Adresa:</i>	Univerzitet u Kragujevcu
	Prirodno-matematički fakultet
	Institut za hemiju
	Radoja Domanovića 12,34000 Kragujevac, Srbija
<i>Tel:</i>	++ (381) 34 336 223, lok.363
<i>Fax:</i>	++ (381) 34 335 040
<i>e-mail:</i>	biljana.petrovic@pmf.kg.ac.rs

OBRAZOVANJE

<i>Osnovna škola:</i>	Zaječar, Srbija, 1977 – 1985.
<i>Srednja škola:</i>	Zaječar, Srbija, 1985 – 1989.
<i>Studije fizike:</i>	Prirodno-matematički fakultet, Grupa za hemiju
	Univerzitet u Kragujevcu
	Kragujevac, 1989 – 1994.
<i>Poslediplomske studije:</i>	Prirodno-matematički fakultet
	Univerzitet u Kragujevcu
	Kragujevac, 1994 -1999.
<i>Doktorske studije:</i>	Prirodno-matematički fakultet
	Univerzitet u Kragujevcu,
	Kragujevac, 1999 – 2005.
<i>Strani jezici:</i>	Engleski

PROFESIONALNA KARIJERA

<i>Docent:</i>	Institut za Hemiju
	Prirodno-matematički fakultet
	Univerzitet u Kragujevcu
	Kragujevac, 2007 -2013
<i>Vanredni profesor:</i>	Institut za Hemiju
	Prirodno-matematički fakultet
	Univerzitet u Kragujevcu
	Kragujevac, 2013 -2020
<i>Redovni profesor:</i>	Institut za Hemiju
	Prirodno-matematički fakultet
	Univerzitet u Kragujevcu
	Kragujevac, 2020 -
<i>Inostrana usavršavanja:</i>	Univerzitet u Erlangenu-Nurnberg, Nemacka – 2006, 2007,

	Univerzitet u Gentu, Belgija, 2009
<i>Predmeti koje predaje:</i>	Neorganska hemija 2 (OAS), Mehanizmi neorganskih reakcija (OAS), Hemija atmosfere (OAS), Neorganske sinteze i metode karakterizacije (MAS), Hemija vodenih rastvora (DAS)
<i>Naučna oblast istraživanja:</i>	Neorganska hemija, Bioneorganska hemija

UČEŠĆE NA PROJEKTIMA

Domaći:	Broj projekta	Naziv projekta
	1254 (2002-2005)	Sinteza i reaktivnost novih organskih jedinjenja i kompleksa metala kao potencijalnih terapijskih i biološki aktivnih agenasa
	142008 (2005-2010)	Struktura novih kompleksa jona prelaznih metala i mehanizam njihovih reakcija sa biološki značajnim ligandima
	172011 (2011-2020)	Ispitivanje mehanizma reakcija kompleksa jona prelaznih metala sa biološki značajnim molekulima
Međunarodni:	Broj projekta	Naziv projekta
	1.	COST action: D39 "Metallo-drug design and action", 2006-2011.
	2.	The bilateral project between Republic of Serbia and Federal Republic of Germany to the project period 2009 – 2010: "Investigation of the mechanism of co interaction of Pd(II) and Pt(II) complexes with biological relevant molecules"
	3.	The bilateral project between Republic of Serbia and Federal Republic of Germany to the project period 2011 – 2012: "Kinetics and mechanism of the reactions of Au(III), Pt(IV) and Ru(II / III) and some biomolecules"
	4.	The bilateral project between Republic of Serbia and Croatia for the period 2010 – 2011: "Study of the interactions of transition metal ion complexes with some important biological ligands"

ČLANSTVO U DOMAĆIM I INOSTRANIM ORGANIZACIJAMA

Član je Srpskog hemijskog društva

MENTORSTVO

<i>Doktorati:</i>	2 odbranjene, 2 u proceduri
<i>Master radovi:</i>	15
<i>Diplomski i završni radovi:</i>	19

Spisak radova prof. dr Biljane Petrović (Djordjević)

- A. Rilak Simović, J. Bogojeski, **B. Petrović**, S. Jovanović-Stević
Bis-pyrazolylpyridine complexes of some transition metal ions: Structure-Activity Relationships and Biological Activity
Macroheterocycles, 2020, 13, 201-209. IF(2019) = 0,855, M23
Oblast: Chemistry, Multidisciplinary.
ISSN: 1998-9539
DOI:10.6060/mhc200499s
- D. Čočić, S. Jovanović-Stević, R. Jelić, S. Matić, S. Popović, P. Djurdjević, D. Baskić, **B. Petrović**
Homo- and hetero-dinuclear Pt(II)/Pd(II) complexes: studies of hydrolysis, nucleophilic substitution reactions, DNA/BSA interactions, DFT calculations, molecular docking and cytotoxic activity
Dalton Transactions, 2020, 49, 14411-14431. IF(2019) = 4,172, M21
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 1477-9226
DOI:10.1039/d0dt02906h
- S. Radisavljevic, A. Djekovic-Kesic, D. Cocic, R. Puchta, L. Senft, M. Milutinovic, N. Milivojevic, **B. Petrovic**
Studies of the stability, nucleophilic substitution reactions, DNA/BSA interactions, cytotoxic activity, DFT and molecular docking of some tetra- and penta-coordinated gold(III) complexes
New Journal of Chemistry, 2020, 4, 11172-11187. IF(2019) = 3,288, M22
Oblast: Chemistry, Multidisciplinary.
ISSN: 1144-0546
DOI: <https://doi.org/10.1039/D0NJ02037K>
- S. Radisavljevic, **B. Petrovic**
Gold(III) complexes: An overview on their kinetics, interactions with DNA/BSA, Cytotoxic activity, and computational calculations
Frontiers in chemistry, 2020, 8, 379 . IF(2019) = 3,693, M22
Oblast: Chemistry, Multidisciplinary
ISSN: 2296-02646
DOI: <https://doi.org/10.3389/fchem.2020.00379>
- M. Medjedovic, A. Rilak Simovic, D. Cocic, M. Milutinovic, L. Senft, S. Blagojevic, N. Milivojevic, **B. Petrovic**
Dinuclear ruthenium(II) polypyridyl complexes: Mechanistic study with biomolecules, DNA/BSA interactions and cytotoxic activity
Polyhedron, 2020, 178, 114334. IF(2018) = 2,284, M22
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 0277-5387
DOI: <https://doi.org/10.1016/j.poly.2019.114334>
- S. Radisavljević, D. Čočić, S. Jovanović, B. Šmit, M. Petković, N. Milivojević, N. Planojević, S. Marković and **B. Petrović**
Synthesis, characterization, DFT study, DNA/BSA-binding affinity, and cytotoxicity of some dinuclear and trinuclear gold(III) complexes
Journal of Biological Inorganic Chemistry, 2019, 24 (7), 1057-1076. IF(2018) = 3,632, M21
Oblast: Chemistry, Inorganic & Nuclear
ISSN: 0949-8257
DOI: <http://doi.org/10.1007/s00775-019-01716-8>

- A. Franich, M. D. Živković, D. Čočić, **B. Petrović**, M. Milovanović, A. Arsenijević, J. Milovanović, D. Arsenijević, B. Stojanović, M. I. Đuran and S. Rajković
New dinuclear palladium(II) complexes with benzodiazines as bridging ligands: interactions with CT-DNA and BSA, and cytotoxic activity
Journal of Biological Inorganic Chemistry, 2019, 24 (7), 1009-1022. IF(2018) = 3,632, M21
Oblast: Chemistry, Inorganic & Nuclear
ISSN: 0949-8257
DOI: <http://doi.org/10.1007/s00775-019-01695-w>
- S. Mangelinckx, M. Kostić, S. Backx, **B. Petrović** and N. De Kimpe
Synthesis of racemic 2-(Aminomethyl)cyclopropane-1,1-dicarboxylic Acid as a New Constrained γ -Amino Dicarboxylic Acid Bypassing Alkyl 3-Aza-2-oxobicyclo[3.1.0]hexane-1-carboxylates
European Journal of Organic Chemistry, 2019, 2019 (31-32), 5187-5189. IF(2018) = 3,029, M21
Oblast: Chemistry, Organic
ISSN: 1434-193X
DOI: <http://doi.org/10.1002/ejoc.201900542>
- **B. Petrović**, S. Jovanović, R. Puchta and R. van Eldik
Mechanistic insight on the chemistry of potential Pt antitumor agents as revealed by collaborative research performed in Kragujevac and Erlangen
Inorganica Chimica Acta, 2019, 495, 118953. IF(2018) = 2,433, M22
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 0020-1693
DOI: <http://doi.org/10.1016/j.ica.2019.06.004>
- S. Jovanović, J. Bogojeski, M. V. Nikolić, M. Ž. Mijajlović, D. Lj. Tomović, A. M. Bukonjić, S.M. Knežević Rangelov, N. R. Mijailović, Z. Ratković, V. V. Jevtić, **B. Petrović**, S. R. Trifunović, S. Novaković, G. Bogdanović and G. P. Radić
Interactions of binuclear copper(II) complexes with S-substituted thiosalicylate derivatives with some relevant biomolecules
Journal of Coordination Chemistry, 2019, 72 (10), 1603-1620. IF(2018) = 1,685, M22
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 0095-8972
DOI: <http://doi.org/10.1080/00958972.2019.1610561>
- Popović, M. Nikolić, M. Mijajlović, Z. Ratković, V. Jevtić, S. R. Trifunović, G. Radić, M. Zarić, P. Čanović, M. Milovanović, S. Radisavljević, M. Mešedović, **B. Petrović** and I. Jovanović
DNA binding and antitumor activities of zinc(II) complexes with some S-alkenyl derivatives of thiosalicylic acid
Transition Metal Chemistry, 2019, 44 (3), 219-228. IF(2018) = 1,016, M23
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 0340-4285
DOI: <http://doi.org/10.1070/s11243-018-0285-6>
- D. Čočić, S. Jovanović, S. Radisavljević, J. Korzekwa, A. Scheurer, R. Puchta, D. Baskić, D. Todorović, S. Popović, S. Matić and **B. Petrović**
New monofunctional platinum(II) and palladium(II) complexes: Studies of the nucleophilic substitution reactions, DNA/BSA interactions, and cytotoxic activity
Journal of Inorganic Biochemistry, 2018, 189, 91-102. IF(2018) = 3,224, M21
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 0162-0134
DOI: <http://dx.doi.org/10.1016/j.jinorgbio.2018.09.005>

- D. Čočić, S. Jovanović, S. Rajković and **B. Petrović**
Kinetics and mechanism of the substitution reactions of dinuclear platinum(II) complexes with important bio-molecules
Inorganica Chimica Acta, 2018,482, 635-642. IF(2018) = 2,433, M22
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 0020-1693
DOI: <http://doi.org/10.1016/j.ica.2018.07.004>
- Z. Besser Silconi, S. Benazić, J. Milovanović, M. Jurišević, D. Đorđević, M. Nikolić, M. Mijajlović, Z. Ratković, G. Radić, S. Radisavljević, **B. Petrović**, G. Radosavljević, M. Milovanović and N. Arsenijević
DNA binding and antitumor activities of platinum (IV) and zinc(II) complexes with some S-alkyl derivatives of thiosalicylic acid
Transition Metal Chemistry, 2018, 43 (8), 719-729. IF(2018) = 1,016, M23
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 0340-4285
DOI: <http://doi.org/10.1070/s11243-018-0260-2>
- S. Radisavljević, A. Đeković-Kesić, S. Jovanović and **B. Petrović**
Kinetics and mechanism of interactions of some monofunctional Au(III) complexes with sulphur nucleophiles
Transition Metal Chemistry, 2018, 43 (4), 331-338. IF(2018) = 1,016, M23
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 0340-4285
DOI: <http://doi.org/10.1070/s11243-018-0221-9>
- D. Čočić, S. Jovanović, M. Nišavić, D. Baskić, D. Todorović, S. Popović, Ž. Bugarčić and **B. Petrović**
New dinuclear palladium(II) complexes: Studies of the nucleophilic substitution reactions, DNA/BSA interactions and cytotoxic activity
Journal of Inorganic Biochemistry, 2017, 175, 67-79. IF(2016) = 3,348, M21
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 0162-0134
DOI: <http://dx.doi.org/10.1016/j.jinorgbio.2017.07.009>
- S. Jovanovic, K. Obrenčević, Ž. D. Bugarčić, I. Popović, J. Žakula, **B. Petrović**
New bimetallic palladium(II) and platinum(II) complexes: studies of the nucleophilic substitution reactions, interactions with CT-DNA, bovine serum albumin and cytotoxic activity
Dalton Transactions, 2016, 45, 12444 – 12457. IF(2016) = 4,029, M21
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 1477-9226
DOI: 10.1039/C6DT02226J
- M. Kosović, S. Jovanović, G. Bogdanović, G. Giester, Ž. Jaćimović, Ž. D. Bugarčić and **B. Petrović**
Kinetics and mechanism of the substitution reactions of some monofunctional Pt(II) complexes with heterocyclic nitrogen donor molecules. Crystal structure of [Pt(bpma)(pzBr)]Cl₂·2H₂O
Journal of Coordination Chemistry, 2016, 69(19), 2819-2831. IF(2016) = 1,795, M22
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 0095-8972
DOI: <http://dx.doi.org/10.1080/00958972.2016.1224336>
- M. Kosović, Ž. Jaćimović, Ž. D. Bugarčić and **B. Petrović**
Kinetics and mechanism of the substitution reactions of some bifunctional palladium(II) complexes with different nitrogen- donor heterocycles
Transition Metal Chemistry, 2016, 41 (2), 161-168. IF(2016) = 1,358, M23
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 0340-4285
DOI: <https://doi.org/10.1007/s11243-015-0008-1>

- M. Kosović, Ž. Jaćimović, Ž. D. Bugarčić and **B. Petrović**
Kinetics and mechanism of the substitution reactions of some monofunctional Pd(II) complexes with different nitrogen-donor heterocycles
Journal of Coordination Chemistry, 2015, 68 (17-18), 3003-3012. IF(2015) = 1,756, M22
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 0095-8972
DOI: <http://dx.doi.org/10.1080/00958972.2015.1044446>
- S. Jovanović, **B. Petrović**, M. Petković and Ž. D. Bugarčić
Kinetics and mechanism of substitution reactions of the new bimetallic
[[PdCl(bipy)]{μ-(NH₂(CH₂)₆NH₂)}{PtCl(bipy)}]Cl(ClO₄) complex with important bio-molecules
Polyhedron, 2015, 101, 206-214. IF(2015) = 2,108, M22
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 0277-5387
DOI: <https://doi.org/10.1016/j.poly.2015.09.021>
- S. Marković, R. Karkalić and **B. Petrović**
Disproportionation reaction of iodous acid, HOIO. Determination of the concentrations of the relevant ionic species H⁺, H₂OI⁺, and IO₃
Research on Chemical Intermediates, 2015, 41, 1293-1300. IF(2015) = 1,833, M22
Oblast: Chemistry, Multidisciplinary
ISSN: 0922-6168
DOI: <https://doi.org/10.1007/s11164-013-1273-2>
- R. M. Karkalić, D. B. Jovanović, S. S. Radaković, D. S. Rajić, **B. V. Petrović**, N. D. Ivanković and Ž. B. Senić
The influence of the passive evaporative cooling vest on a chemical industry workers and physiological strain level in hot conditions
Hemijska industrija, 2015, 69 (6), 587-594. IF(2015) = 0,437, M23
Oblast: Engineering, Chemistry
ISSN: 0367-598X
DOI: <https://doi.org/10.2298/HEMIND140705079K>
- S. Jovanović, **B. Petrović**, Ž. D. Bugarčić and R. Van Eldik
Reduction of some Pt(IV) complexes with biologically important sulfur-donor ligands
Dalton Transaction, 2013, 42 (24), 8890 – 8896. IF(2013) = 4,097, M21
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 1477-9226
DOI: 10.1039/C3DT50751C
- A. Mijatović, R. M. Jelić, J. Bogojeski, Ž. D. Bugarčić and **B. V. Petrović**
Kinetics, mechanism, and equilibrium studies of the reactions between ruthenium(II) complex and some nitrogen- and sulfur-donor nucleophiles
Monatshefte für Chemie, 2013, 144, 1489-1498. IF(2013) = 1,347, M22
Oblast: Chemistry, Multidisciplinary
ISSN: 0026-9247
DOI: <https://doi.org/10.1007/s00706-013-1044-1>
- E. Selimović, **B. Petrović**, D. Čanović, Ž. D. Bugarčić and J. Bogojeski
Kinetic studies on the reactions of [(TLtBu)PtCl]⁺ and [Pt(tpdm)Cl]⁺ complexes with some thiols and thioethers
Australian Journal of Chemistry, 2013, 66, 534-538. IF(2013) = 1,644, M22
Oblast: Chemistry, Multidisciplinary
ISSN: 0004-9425
DOI: <https://doi.org/10.1071/CH12218>

- A. Mijatović, B. Šmit, A. Rilak, **B. Petrović**, D. Čanović, Ž. D. Bugarčić
NMR kinetic studies of the interactions between $[\text{Ru}(\text{terpy})(\text{bipy})(\text{H}_2\text{O})]^{2+}$ and some sulfur-donor ligands
Inorganica Chimica Acta, 2013, 394, 552-557. IF(2013) = 2,041, M22
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 0020-1693
DOI: <https://doi.org/10.1016/j.ica.2012.09.016>
- E. Selimović, T. Vulović, **B. Petrović**, Ž. Bugarčić and J. Bogojeski
Complex formation reactions of two sterically hindered platinum(II) complexes with some N-bonding ligands
Transition Metal Chemistry, 2013, 38, 635-640. IF(2013) = 1,402, M23
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 0340-4285
DOI: <https://doi.org/10.1007/s11243-013-9731-7>
- **B. Petrović**, Ž. D. Bugarčić, A. Dees, I. Ivanović-Burmazović, F. W. Heinemann, R. Puchta, S. N. Steinmann, C. Corminboeuf and R. van Eldik
Role of π -Acceptor Effects in Controlling the Lability of Novel Monofunctional Pt(II) and Pd(II) Complexes: Crystal Structure of $[\text{Pt}(\text{tripyridinedimethane})\text{Cl}]\text{Cl}$
Inorganic Chemistry, 2012, 51, 1516-1529. IF(2012) = 4,593, M21a
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 0020-1669
DOI: 10.1021/ic201807a
- Ž. D. Bugarčić, J. Bogojeski, **B. Petrović**, S. Hochreuther and R. van Eldik
Mechanistic studies on the reactions of platinum(II) complexes with nitrogen and sulfur-donor biomolecules
Dalton Transactions, 2012, 41, 12329-12345. IF(2012) = 3,806, M21
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 1477-9226
DOI: 10.1039/C2DT31045G
- A. Djeković, **B. Petrović**, Ž. D. Bugarčić, R. Puchta and R. van Eldik
Kinetics and mechanism of the reactions of Au(III) complexes with some biologically relevant molecules
Dalton Transactions, 2012, 41, 3633-3641. IF(2012) = 3,806, M21
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 1477-9226
DOI: 10.1039/C2DT11843B
- M. Djurović, J. Bogojeski, **B. Petrović**, D. Petrović, F.W. Heinemann and Ž. D. Bugarčić
Ligand substitution reactions of some sterically hindered Pt(II) complexes. The crystal structure of $[\text{TL}^{\text{tBu}}\text{H}_2](\text{ClO}_4)_2 \cdot 0.5\text{H}_2\text{O}$
Polyhedron, 2012, 41, 70-76. IF(2012) = 1,813, M22
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 0277-5387
DOI: <https://doi.org/10.1016/j.poly.2012.04.024>
- A. Mijatović, J. Bogojeski, **B. Petrović** and Ž. D. Bugarčić
Substitution reactions of some novel sterically hindered monofunctional Pd(II) complexes
Inorganica Chimica Acta, 2012, 383, 300-304. IF(2012) = 1,687, M22
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 0020-1693
DOI: <https://doi.org/10.1016/j.ica.2011.11.031>
- R. Jelić, S. Marković and **B. Petrović**
Equilibrium studies on complex formation reactions of dichlorido[(R,R)-trans-1,2-diaminocyclohexane] platinum(II) complex with ligands of biological significance
Monatshefte für Chemie, 2011, 142, 985-992. IF(2011) = 1,532, M22
Oblast: Chemistry, Multidisciplinary
ISSN: 0026-9247 DOI: <https://doi.org/10.1007/s00706-011-0553-z>

- A. Rilak, **B. Petrović**, S. Grgurić-Šipka, Ž. Tešić and Ž. D. Bugarčić
Kinetics and mechanism of the reactions of Ru(II)–arene complex with some biologically relevant ligands
Polyhedron, 2011, 30, 2339-2344. IF(2011) = 2,057, M22
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 0277-5387
DOI: <https://doi.org/10.1016/j.poly.2011.06.019>
- B. Damjanović, B. Petrović, **B. Petrović**, J. Dimitrić-Marković and M. Petković
Comparison of MALDI-TOF mass spectra of [PdCl(dien)]Cl and [Ru(en)₂Cl₂]Cl acquired with different matrices
Journal of the Serbian Chemical Society, 2011, 76, 1687-1701. IF(2011) = 0,879, M23
Oblast: Chemistry, Multidisciplinary
ISSN: 0352-5139
DOI: 10.2298/JSC110201145D
- B. Damjanović, T. Kamčeva, **B. Petrović**, Ž. D. Bugarčić and M. Petrović
Laser desorption and ionization time-of-flight versus matrix-assisted laser desorption and ionization time of-flight mass spectroscopy of Pt(II) and Ru(III) metal complexes
Analytical Methods, 2011, 3, 400-407. IF(2011) = 1,547, M23
Oblast: Chemistry, Analytical
ISSN: 1759-9660
DOI: 10.1039/C0AY00517G
- S. Jovanović, **B. Petrović**, P. Čanović and Ž. D. Bugarčić
Kinetics of the substitution reactions of some Pt(II) complexes with 5-GMP and L-histidine
International Journal of Chemical Kinetics, 2011, 43, 99-106. IF(2011) = 1,007, M23
Oblast: Chemistry, Physical
ISSN: 0538-8066
DOI: 10.1002/kin.20537
- M. Milovanović, A. Djeković, V. Volarević, **B. Petrović**, N. Arsenijević and Ž. D. Bugarčić
Ligand substitution reactions and cytotoxic properties of [Au(L)Cl₂]⁺ and [AuCl₂(DMSO)₂]⁺ complexes (L = ethylenediamine and S-methyl-cysteine)
Journal of Inorganic Biochemistry, 2010, 104(9), 944-949. IF(2010) = 3,317, M21
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 0162-0134
DOI: <https://doi.org/10.1016/j.jinorgbio.2010.04.014>
- S. Jovanović, **B. Petrović** and Ž. Bugarčić
UV-Vis, HPLC, and ¹H-NMR studies of the substitution reactions of some Pt(IV) complexes with 5'-GMP and L-histidine
Journal of Coordination Chemistry, 2010, 63(14-16), 2419-2430. IF(2010) = 1,932, M22
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 0095-8972
DOI: <http://dx.doi.org/10.1080/00958972.2010.490296>
- M. Petković, **B. Petrović**, Ž. D. Bugarčić, J. Dimitrić-Marković, T. Momić and V. Vasić
Flavonoids as matrices for MALDI-TOF mass spectroscopy analysis of transition metal complexes
International Journal of Mass Spectrometry, 2010, 290, 39-46. IF(2010) = 2,009, M22
Oblast: Spectroscopy
ISSN: 1387-3806
DOI: <https://doi.org/10.1016/j.ijms.2009.12.001>
- V. Volarević, M. Milovanović, A. Djeković, **B. Petrović**, N. Arsenijević and Ž. D. Bugarčić
The cytotoxic effects of some selected gold(III) complexes on 4T1 cells and their role in the prevention of breast tumor growth in BALB/c mice
Journal of the Balcan Oncology, 2010, 15, 768-773. IF(2010) = 0,482, M23
Oblast: Oncology
ISSN: 1107-0625,

- S. Marković and **B. Petrović**
Kinetics of the disproportionation reactions of HIO_2 in acidic aqueous solutions
International Journal of Chemical Kinetics, 2010, 42(11), 687-691. IF(2010) = 1,154, M23
Oblast: Chemistry, Physical
ISSN: 0538-8066
DOI: 10.1002/kin.20516
- **B. Petrović**, Ž. D. Bugarčić and R. van Eldik
Kinetic studies on the reactions of $[\text{Pd}(\text{dach})(\text{X}-\text{Y})]$ complexes with some DNA constituents
Dalton Transactions, 2008, 807-813. IF(2008) = 3,580, M21
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 1477-9226
DOI:10.1039/B714329J
- Ž. D. Bugarčić, **B. Petrović**, Z. M. Bugarčić, S. M. Janković, S. V. Janković, G. Lukić, M- Novaković, V. Kostović, S. Popović, P. Djurdjević, D. Baskić and N. Arsenijević
Effects of cisplatin and other Pt(II) complexes on spontaneous motility of isolated human oviduct
Toxicology in Vitro, 2008, 22, 1878-1882. IF(2008) = 2,473, M22
Oblast: Toxicology
ISSN: 0887-2333
DOI: <https://doi.org/10.1016/j.tiv.2008.09.011>
- B. Šmit, **B. Petrović**, S. Sovilj, D. Čanović and Ž. D. Bugarčić
Study of the reactions of cisplatin with ranitidine and nizatidine by means of ^1H NMR spectroscopy in D_2O
Monatshefte fur Chemie, 2008, 139, 1197-1202. IF(2008) = 1,426, M22
Oblast: Chemistry, Multidisciplinary
ISSN: 0026-9247
DOI: <https://doi.org/10.1007/s00706-008-0915-3>
- Z. M. Bugarčić, **B. Petrović** and M. D. Rvović
Kinetics and mechanism of the pyridine-catalyzed reaction of phenylselenenyl halides and some unsaturated alcohols
Journal of Molecular Catalysis. A: Chemical, 2008, 287(1-2), 171-175. IF(2008) = 2,814, M22
Oblast: Chemistry, Physical
ISSN: 1381-1169
DOI: <https://doi.org/10.1016/j.molcata.2008.03.014>
- Ž. D. Bugarčić, J. Rosić, **B. Petrović**, N. Summa, R. Puchta and R. van Eldik
Kinetics and mechanism of the substitution reactions of $[\text{PtCl}(\text{bpma})]^+$, $[\text{PtCl}(\text{gly}-\text{met}-\text{S},\text{N},\text{N})]$ and their aqua analogues with L-methionine, glutathione and 5'-GMP
Journal of Biological Inorganic Chemistry, 2007, 12, 1141-1150. IF(2007) = 3,325, M21
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 0949-8257
DOI 10.1007/s00775-007-0283-1
- D. Petrović, B. Stojimirović, B. Petrović, Z. M. Bugarčić and Ž. D. Bugarčić
Studies of interactions between platinum(II) complexes and some biologically relevant molecules
Bioorganic and Medicinal Chemistry, 2007, 4203-4211. IF(2007) = 2,662, M22
Oblast: Chemistry, Medicinal
ISSN: 0968-0896
DOI: <https://doi.org/10.1016/j.bmc.2007.03.059>
- J. Rosić, **B. Petrović**, M. I. Djuran and Ž. D. Bugarčić
Thermodynamic and kinetic studies on reactions of Pt(II) complexes with pyrazole, pyridazine and 1,2,4-triazole
Monatshefte fur Chemie, 2007, 138, 1-11. IF(2007) = 0,972, M22
Oblast: Chemistry, Multidisciplinary
ISSN: 0026-9247
DOI: <https://doi.org/10.1007/s00706-006-0568-z>

- D. Jaganui, F. Tiba, O. Q. Munro, **B. Petrović** and Ž. D. Bugarčić
Kinetic and mechanistic study on the reactions of $[\text{Pt}(\text{bpma})(\text{H}_2\text{O})]^{2+}$ and $[\text{Pd}(\text{bpma})(\text{H}_2\text{O})]^{2+}$ with some nucleophiles. Crystal structure of $[\text{Pd}(\text{bpma})(\text{py})](\text{ClO}_4)_2$
Dalton Transactions, 2006, 24, 2943-2949. IF(2006) = 3,012, M21
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 1477-9226
DOI: 10.1039/B602950G
- **B. Petrović** and Ž. D. Bugarčić
Kinetics and mechanistic study on the reactions of $[\text{Pd}(\text{dien})\text{H}_2\text{O}]^{2+}$ and $[\text{Pt}(\text{dien})\text{H}_2\text{O}]^{2+}$ with L-cysteine and S-methyl-L-cysteine
Austalian Journal of Chemistry, 2005, 58, 7, 544-550. IF(2005) = 1,456, M22
Oblast: Chemistry, Multidisciplinary
ISSN: 0004-9425
DOI: <https://doi.org/10.1071/CH05033>
- Ž. D. Bugarčić, **B. Petrović** and E. Zangrando
Kinetics and mechanism of the complex formation of $[\text{Pd}(\text{NNN})\text{Cl}]^+$ with pyridines in methanol: synthesis and crystal structure of $[\text{Pd}(\text{terpy})(\text{py})](\text{ClO}_4)_2$
Inorganica Chimica Chim. Acta, 2004, 357, 9, 2650-2656. IF(2004) = 1,554, M22
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 0020-1693
DOI: <https://doi.org/10.1016/j.ica.2004.02.015>
- V. Vasić, M. Čakar, J. Savić, **B. Petrović**, J. Nedeljković and Ž. Bugarčić
Influence of sodium dodecylsulfate on the kinetics of complex formation between $[\text{PdCl}(\text{dien})]^+$ and sulfur containing ligands L-cysteine and glutathione
Polyhedron, 2003, 22, 279-285. IF(2003) = 1,584, M22
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 0277-5387
DOI: [https://doi.org/10.1016/S0277-5387\(02\)01307-4](https://doi.org/10.1016/S0277-5387(02)01307-4)
- Ž. D. Bugarčić, **B. V. Petrović** and R. Jelić
Hydrolysis of $[\text{Pt}(\text{dien})\text{H}_2\text{O}]^{2+}$ and $[\text{Pd}(\text{dien})\text{H}_2\text{O}]^{2+}$ complexes in aqueous solutions
Transition Metal Chemistry, 2001, 26, 6, 668-671. IF(2001) = 0,779, M23
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 0340-4285
DOI: <https://doi.org/10.1023/A:1012064512961>
- **B. V. Petrović** and Ž. D. Bugarčić
Kinetics and mechanism of complex formation between $[\text{PtCl}(\text{dien})]^+$ and thiols and thioethers
Journal of Coordination Chemistry, 2001, 53, 35-45. IF(2001) = 0,623, M23
Oblast: Chemistry, Inorganic and Nuclear
ISSN: 0095-8972
DOI: <http://dx.doi.org/10.1080/00958970108022599>
- Ž. D. Bugarčić and **B. V. Djordjević**
Kinetics and mechanism for the reactions of platinum(II) complexes and thioglycolic acid
Monatshefte fur Chemie, 1998, 129, 1267-1274. IF(1998) = 0,563, M22
Oblast: Chemistry, Multidisciplinary
ISSN: 0026-9247
DOI: <https://doi.org/10.1007/PL00010138>

Udžbenici i praktikumi

- **Biljana Petrović**
Hemija atmosfere
Prirodno-matematički fakultet, Univerzitet u Kragujevcu, 2019, ISBN 978-86-6009-065-4
- Živadin D. Bugarčić, **Biljana V. Petrović**
Mehanizmi neorganskih reakcija, Praktikum
Prirodno-matematički fakultet, Univerzitet u Kragujevcu, Kragujevac, 2007, ISBN 978-86-81829-79-0
- Živadin D. Bugarčić, Ratomir M. Jelić, **Biljana V. Petrović**
Sinteza i karakterizacija kompleksnih jedinjenja – praktikum
Prirodno-matematički fakultet, Univerzitet u Kragujevcu, Kragujevac, 2010, ISBN 978-86-6009-007-4

Saopštenja na međunarodnim skupovima štampana u izvodu M34:

- M. Medjedovic, A. Rilak Simovic, **B. Petrovic**
Synthesis and characterization of new bifunctional ruthenium(II) polypyridyl complexes
9th International Conference of the Chemical Societies of the South-Eastern European Countries
8th-11th May 2019, Targoviste, Romania
- D. Cocic, S. Jovanovic, R. Puchta, **B. Petrovic**
Relative stability of homo- and hetero-bimetallic Pd(II) and Pt(II) complexes compared to their mononuclear analogues
Molecular modelling workshop Erlangen, 08.04.-10.04.2019, Germany
- S. Radisavljevic, A. Scheured, R. Puchta, **B. Petrovic**
New dinuclear and trinuclear gold(III) complexes: Synthesis, characterization and study of their interactions with DNA/BSA
Women in Science 1st Erlangen Symposium, 9th-11th December 2018
- J.V. Bogojeski, S. Jovanović-Stević, **B. Petrović**, M.Ž.Mijajlović, M.V. Nikolić, A.M.Bukonjić, D.Lj. Tomović, A.S. Stanković, V. V. Jevtić, Z.R. Ratković, S.R. Trifunović, G.P. Radić
Reactivity of copper(II) complexes of S-alkyl derivatives of thiosalicylic acid toward small biomolecules, calf thymus DNA and bovine serum albumin
25th Congress of Chemists and Technologists of Macedonia, Ohrid, Macedonia, September 19-22, 2018
- S. Jovanović, D. Čočić, A. Scheurer, R. Puchta, J. Bogojeski, **B. Petrović**
The interactions of new platinum(II) and palladium(II) complexes with CT-DNA and BSA
25th Young Research Fellow Meeting, France, March 5-7, 2018
- D. Čočić, S. Jovanović, S. Rajković, R. Puchta, **B. Petrović**
Kinetic studies of the interactions between pyrazine-bridged dinuclear Pt(II) complexes and some bio-relevant nucleophiles
25th Young Research Fellow Meeting, France, March 5-7, 2018
- M. Kosović, **B. Petrović**, Ž. Jaćimović, Ž. D. Bugarčić
Kinetics and mechanism of the substitution reactions between some Pd(II) complexes and unsaturated N-heterocycles
Third EuChemS Inorganic Chemistry Conference, Wrocław, Poland, June 28 – July 1. 2015
- E. Selimović, J. Bogojeski, **B. Petrović**, Ž. D. Bugarčić
Complex formation reactions of two sterically hindered Pt(II) complexes with some sulfur and nitrogen bonding ligands
8th International Conference of the Chemical Societies of the South-East European Countries, ICOSECS 8, Belgrade, Serbia, June 27-29, 2013

- S. Mangelinckx, M. Rvović, S. De Brabandere, **B. Petrović**, Ž. D. Bugarčić, N. De Kimpe
Synthesis of 2-(aminomethyl)cyclopropane-1,1-dicarboxylic acid as a new conformationally constrained γ -amino diacid
15th Sigma Aldrich Organic Synthesis Meeting, Spa, Belgium, 01-02/12/2011
- A. Mijatović, **B. Petrović**, R. Jelić, Ž. D. Bugarčić
Equilibrium and kinetic studies of the reactions between [Ru(terpy)(bipy)Cl]Cl complex and biologically important N-donor ligands
EUROanalysis, 16th European Conference on Analytical Chemistry, 11-15 September 2011, Belgrade, Serbia
- J. Bogojeski, M. Djurovic, A. Mijatovic, **B. Petrović**, Ž. D. Bugarčić
Kinetics and mechanism of the substitution reactions of some Pt(II) and Pd(II) complexes
EICC-1, First EuCheMS Inorganic Chemistry Conference, University of Manchester, UK, 11-14 April, 2011. Book of Abstract, RM P12
- A. Đeković, **B. Petrović**, R. van Eldik, Ž.D. Bugarčić
Kinetics and mechanism of the substitution reactions between some bifunctional Au(III) complexes and biologically relevant ligands
EICC-1, First EuCheMS Inorganic Chemistry Conference, University of Manchester, UK, 11-14 April, 2011. Book of Abstract, RM P13
- **B. Petrović**, S. Jovanović, Ž. D. Bugarčić
Mechanism of the substitution reactions of some Pt(IV) complexes with 5-GMP and histidine
10th European Biological Inorganic Chemistry Conference, June 22-26, 2010, Thessaloniki, Greece, p. 197
- S. Jovanović, **B. Petrović**, Ž. D. Bugarčić
The UV-VIS, HPLC and HMR studies of the substitution reactions of [PtCl₄(dach)] complex with 5'-GMP and histidine
10th International Symposium on Applied Bioinorganic Chemistry, 25-28 September, 2009. Debrecen, Hungary, P12
- M. Milovanović, V. Volarević, A. Đeković, **B. Petrović**, Ž.D. Bugarčić, N. Arsenijević
Effect of Au(III) complexes on human lymphocyte leukemia (HLL) cells
The 5th International Conference on Gold Science, Technology and Its Applications, University of Heidelberg, Germany, 26-29 July, 2009, Book of Abstract, p. 357
- A. Đeković, **B. Petrović**, Ž.D. Bugarčić
Kinetics and mechanism of the substitution reactions between some Au(III) complexes and biologically relevant ligands
The 5th International Conference on Gold Science, Technology and Its Applications, University of Heidelberg, Germany, 26-29 July, 2009, Book of Abstract, p. 349
- **B. Petrović**, A. Dees, I. Ivanovic-Burmazović, R. van Eldik, Ž. D. Bugarčić
Reactivity of some biomolecules toward novel monofunctional Pt(II) complex
4th Central European conference Chemistry toward Biology, Dobogoko, Hungary, 2008, September 8-11, Book of Abstracts, P 118
- R. Jelić, **B. Petrović**, P. Djurđević, Ž. D. Bugarčić
Equilibrium studies of the reactions between [Pt(H₂O)₂(dach)]²⁺ complex and some sulphur and nitrogen donor biomolecules
4th Central European conference Chemistry toward Biology, Dobogoko, Hungary, 2008, September 8-11, Book of Abstracts, P 94
- J. Rosić, A. Djeković, **B. Petrović**, Ž. D. Bugarčić
The interaction between Pt(II) complexes and some sulphur and nitrogen donor biomolecules
6th International Conference of the Chemical Societies of the South-Eastern European Countries, 2008, Sofia, Bulgaria, September 10-14, Book of Abstracts, P 174

- J. Rosić, T. Soldatović, **B. Petrović**, Ž. D. Bugarčić
The interaction between Pt(II) complexes and some sulphur and nitrogen donor biomolecules
9th FIGIPAS Meeting in Inorganic Chemistry, 2007, Vienna, Austria, July 4 – 7. Book of Abstracts, PO165
- V. Divac, M. Rvović, **B. Petrović**, Z. Bugarčić
Kinetics and mechanism of the reactions of phenylselenenyl halogenides and some unsaturated alcohols
5th International Conference of the Chemical Societies of the South-East European Countries, 2006, Ohrid, Macedonia, September 10-14, PCH-13
- J. Rosić, T. Soldatović, **B. Petrović**, Ž. D. Bugarčić
Kinetics and mechanism of the substitution reactions between monofunctional Pt(II) complexes with some sulfur and nitrogen donor biomolecules
5th International Conference of the Chemical Societies of the South-East European Countries, 2006, Ohrid, Macedonia, September 10-14, PCH-62
- **B. Petrović**, J. Rosić, Ž. Bugarčić
Kinetics and mechanism of the reactions between Pt(II) and Pd(II) complexes with sulfur-bonding ligands
4th International Conference of the Chemical Societies of the South-East European Countries, 2004, Belgrade, SCG, July 18-21
- L. Cattalini, G. Annibale, M. Brandolisio, Ž. Bugarčić, **B. Đorđević**
Nucleophilicity of thiols and thioethers towards platinum(II) substrates
XXXIII International Conference of Coordination Chemistry, 1998, Florence, Italy, August 30 – September 4, p. 583
- Ž. D. Bugarčić, **B. V. Đorđević**
Study of the reactions between platinum(II) complexes and thiols
1st International Conference of the Chemical Societies of the South-East European Countries, 1998, Halkidiki, Greece, June 1-4, PO 18
- **B. V. Đorđević**, Ž. D. Bugarčić
Kinetics and mechanism of the reaction between [Pt(dien)Cl]⁺ and sulfur-bonding ligands
1st International Conference of the Chemical Societies of the South-East European Countries, 1998, Halkidiki, Greece, June 1-4, PO 30

Radovi u nacionalnim časopisima M53:

- M. Medjedovic, **B. Petrović**
Litijum – opšte karakteristike i primena u industriji, medicini i farmaciji
Hemijski pregled, 2019, 60, broj 6, 139-145
- S. Jovanović, D. Čočić, **B. Petrović**
Interakcije dinuklearnih kompleksa platine(II) i paladijuma(II) sa biološki važnim molekulima
Hemijski pregled, 2017, 58 broj 6, 110-118
- D. Čočić, **B. V. Petrović**
Čestice u vazduhu – atmosferski zagađivači
Hemijski pregled, 2017, 58, broj 1, 9-15.
- **B. V. Petrović**, M. I. Djuran, Ž. D. Bugarčić
Binding of platinum(II) to some biologically important thiols
Metal-Based Drugs, 1999, 6, 355-360.
- **B. V. Đorđević**, Ž. D. Bugarčić
Tvrde i meke kiseline i baze
Hemijski pregled, 1998, 39, broj 5-6, 130.

- Ž. D. Bugarčić, **B. V. Djordjević**, M. I. Djuran
Mechanism of the reactions between chloro(2,2':6',2'')-terpyridine) platinum(II) and ligands containing a thiol group
J. Serb. Chem. Soc., 1997, 62, 11, 1031-1036.

Predavanja po pozivu na skupu nacionalnog značaja štampano u izvodu M62:

- M. Kosović, **B. Petrović**, Ž. Jaćimović, Ž. D. Bugarčić
Sinteza i karakterizacija novih kompleksa Pt(II) sa derivatima pirazola
51. Savetovanje Srpskog Hemijskog Društva, Niš, Serbia, June 5-7, 2013

Saopštenja sa domaćih skupova štampana u izvodu M64:

- S. Radisavljević, A. Djeković Kesic, **B. Petrović**
New gold(III) complexes: Synthesis, characterization and study of their interactions with 5'-GMP, GSH and Met
56th Meeting of the Serbian Chemical Society, 7-8 June 2019, Nis, Serbia
- M. Međedović, D. Čočić, S. Radisavljević, **B. Petrović**
Investigation of the type of interactions between novel platinum(I) and paladium(II) complexes and DNA
Sixt Conference of the Young Chemist of Serbia, Belgrade, 27th October, 2018
- S. Radisavljević, D. Čočić, **B. Petrović**
New dinuclear gold(III) complexes: Synthesis, characterization and study of their interactions with DNA/BSA
55. Savetovanje Srpskog hemijskog društva, Novi Sad, Serbia, June 8-9, 2018
- D. Čočić, S. Radisavljević, S. Jovanović, **B. Petrović**
The study of the nucleophilic substitution reactions of the new platinum(II) and paladium(II) complexes with some bio- relevant ligands
55. Savetovanje Srpskog hemijskog društva, Novi Sad, Serbia, June 8-9, 2018
- D. Čočić, S. Jovanović, S. Rajković, R. Puchta, **B. Petrović**
Kinetic studies and determination of products of interactions between pyrazine-bridged dinuclear Pt(II) complexes and some biologically important molecules by HPLC and DFT calculation
International Meeting on medicinal and bio(in)organic chemistry, Vrnjacka Banja, Serbia, August 29-31, 2017
- D. Čočić, S. Jovanović, Ž. D. Bugarčić, **B. Petrović**
Ispitivanje interakcija bimetalnih kompleksa platine(II) i paladijuma(II) sa DNK i BSA
Konferencija mladih hemičara Srbije, Beograd, 5. Novembar 2016, p. 76
- S. Jovanović, **B. Petrović**, Ž. D. Bugarčić
Sinteza i karakterizacija novih bimetalnih kompleksa platine(II) i paladijuma(II) i ispitivanje njihovih interakcija sa važnim biomolekulima
53. Savetovanje Srpskog hemijskog društva, Kragujevac, Serbia, 10-11. Jun, 2016, p. 52
- S. Jovanović, **B. Petrović**, Ž. D. Bugarčić
Kinetika i mehanizam supstitucionih reakcija bimetalnog kompleksa platine(II) i paladijuma(II) sa biološki važnim ligandima
52. Savetovanje Srpskog Hemijskog Društva, Novi Sad, Serbia, Maj, 29-30, 2015
- M. Djurović, J. Bogojeski, **B. Petrović**, Ž. D. Bugarčić
Kinetics and the mechanism of the substitution reactions of monofunctional Pt(II) complexes, [(TL^{tBu})PtCl]ClO₄ and [Pt(tpdm)Cl]⁺
49th Meeting of the Serbian Chemical Society, Kragujevac, 13-14 May, 2011, NH070

- A. Đeković, **B. Petrović**, Ž.D. Bugarčić
Study of interactions of some monofunctional Au(III) complexes with S-donor ligands
49th Meeting of the Serbian Chemical Society, Kragujevac, 13-14 May, 2011, NH06-O
- A. Rilak, **B. Petrović**, S. Grgurić, I. Ivanović
Kinetics of the substitution reactions of some Ru(III) complexes with N-donor biologically relevant nucleophiles
XLVIII Savetovanje srpskog hemijskog društva, Novi Sad, 17-18. april 2010, p. 76
- A. Đeković, **B. Petrović**, Ž.D. Bugarčić
Kinetics and mechanism of the substitution reactions between some Au(III) complexes and biologically relevant ligands
47th Meeting of the Serbian Chemical Society, Belgrade, Serbia, March 21, 2009, Book of Abstract NH02
- **B. Petrović**, D. Jaganui, Ž. D. Bugarčić
Synthesis and crystal structure of [Pd(pap)(py)](ClO₄)₂
XII konferencija Srpskog kristalografskog društva, 2004, Kragujevac, SCG, PMF, Septembar 16-18., p.30
- **B. Petrović**, E. Zangrando, Ž. Bugarčić
Synthesis and crystal structure of [Pd(terpy)(py)](ClO₄)₂
XI konferencija Srpskog kristalografskog društva, 2003, Oplenac, SCG, 25-27 Septembar
- D. Ilić, S. U. Milinković, **B. V. Đorđević**, Ž. D. Bugarčić, M. I. Đuran
Chelate complexes of some transition elements as a new additives for animal food
XXXIX Savetovanje srpskog hemijskog društva, 1999, Beograd, SCG, 15-17 Oktobar, s. 170
- **B. V. Petrović**, Ž. D. Bugarčić
Mechanism of the complex formation reactions between [PtCl(dien)]⁺ with L-cysteine and S-methyl-L-cysteine
XXXIX Savetovanje srpskog hemijskog društva, 1999, Beograd, SCG, 15-17 Oktobar, p. 167