

PERSONAL INFORMATION

Zoran Simić



R. Domanovića 12, 34000 Kragujevac, Serbia

☎ ++381 34 336223 lok. 236 📞

✉ zoran.simic@pmf.kg.ac.rs

Sex Male | Date of birth 28/04/1959 | Nationality Serbian

WORK EXPERIENCE

February 1987 - present

Asisstant

Faculty of Science, University of Kragujevac, Serbia; www.pmf.kg.ac.rs

- Teaching: Analytical Chemistry, Environmental chemistry

February 2014 - present

Research Associate

Faculty of Science, University of Kragujevac, Serbia; www.pmf.kg.ac.rs

- Researching: Analytical Chemistry in non-aqua solutions, AAS, AES

EDUCATION

2008 –2012

PhD in Chemistry – Analutical chemistry

Doctoral studies at Faculty of Science, University of Kragujevac, Serbia

- Thesis title „Primena sulfidnih minerala kao potenciometrijskih senzora za acido-bazne titracije u nekim nevodnim rastvaračima“

1987-1991

MSc degree in Chemistry

Master studies at Faculty of Science, University of Kragujevac, Serbia

- Thesis title „Kulometrijsko-potenciometrijsko određivanje baza u nitrilima, nitrometanu i sulfolanu“

1979 - 1982

BSc degree in Chemistry

Studies of chemistry at Faculty of Science, University of Kragujevac, Serbia

1974 - 1978

First Grammar School of Kragujevac, Serbia

PERSONAL SKILLS

Languages Russian, English

- Computer skills
- MS Office
 - Origin pro
 - SciFinder

ANNEXES

- Publications
- International Conferences
- National Conferences

Publications

1. R. Mihajlović, V. Vajgand, **Z. Simić**,
“Coulometric generation of hydrogen ions by anodic oxidation of some organic compounds in nitromethane, sulpholane, acetonitrile and acetic acid-acetic anhydride”, *Anal. Chim. Acta.*, 265 (1992) 35-42.
2. R. Mihajlović, **Z. Simić**, Lj. Mihajlović, A. Jokić, M. Vukašinović, N. Rakićević, “Application of hydrogen-palladium and deuterium-palladium electrodes in the coulometric-potentiometric determination of bases in some dipolar aprotic solvents”, *Anal. Chim. Acta.*, 318 (1996) 287-295.
3. M. Antonijević, **Z. Simić**, Z. Petrović,
“Natural Sulphide Minerals as Sensors for Determination of Total Acidity of Humic and Fulvic Acids”, *Sensor Letters*, 7 (2009) 523-529.
4. Z. Stanić, T. Dimić and **Z. Simić**,
“Noble Metal Oxides Electrodes and Analytical Application thereof for Acid-Base Titrations in Non-Aqueous Solvents”, *J. Electrochem. Soc.* 159 (2012) J168-J175.
5. R. Mihajlović, **Z. Simić**, Lj. Mihajlović, M. Vukićević,
“Determination of autoprotolysis constants of some non-aqueous solvents using coulometric titration”, *Talanta*, 43 (1996) 2131-2136.
6. **Z. Simić**, Z. Stanić, M. Antonijević,
“Use of sulphide minerals as electrode sensors for acid-base potentiometric titrations in non-aqueous solvents and their application for the determination of certain biologically active substances” *Sensor Letters*, 8 (2010) 784-791.
7. **Z. Simić**, Z. Stanić, M. Antonijević,
“Application of Pyrite and Chalcopyrite Electrodes for the Acid-Base Determinations in Nitriles” *J. Braz. Chem. Soc.*, 22 (2011) 709-711.
8. Z. Stanić, T. Dimić, **Z. Simić**, Lj. Jakšić, S. Girousi,
“Electrochemical characterization and analytical application of arsenopyrite mineral in non-aqueous solutions by voltammetry and potentiometry”, *Polyhedron* 30 (2011) 702-707.
9. Z. Stanić, J. Stepanović, **Z. Simić**,
“Arsenopyrite mineral based electrochemical sensor for acid–base titrations in γ -butyrolactone and propylene carbonate”, *Monatsh. Chem.* 143 (2012) 1-6.
10. Z. Stanić, J. Stepanović, **Z. Simić**,
“Voltammetric and potentiometric characterization of magnetite electrode for the assay of weak organic acids in non-aqueous media”, *Polyhedron* 45 (2012) 43-47.
11. Z. Stanić, and **Z. Simić**
“Palladium metal electrode and its analytical application to precipitation and acid-base analysis in aqueous and non-aqueous media” *Journal of Solid State Electrochemistry* 18 (2014) 1823-1832.
12. **Z. Simić**, and Z. Stanić
„TiO₂-modified carbon paste electrode as a sensor for the assay of weak organic acids/bases and complex matrix samples” *Electroanalysis* 27 (2015) 2699-2707.
13. N. Zlatić, M. Stanković, **Z. Simić**
„Secondary metabolites and metal content dynamics in *Teucrium montanum* L. and *Teucrium chamaedrys* L. from habitats with serpentine and calcareous substrate” *Environ Monit Assess* 189:110 (2017).

14. M. Radulović, M. Stanković, **Z. Simić**, M. Radaković and M. Topuzović
„The accumulation of metals in the *Polygonum aviculare* L. in area of the Kraljevo city“ Kragujevac J. Sci. 36 (2014) 175-184.
15. J. Milivojević, V. Đekić, M. Jelić, Lj. Bošković-Rakočević, **Z. Simić**, V. Perišić
„Genotype specificity of winter wheat in zinc and copper accumulation in grain“ Agriculture & Forestry, 61 (2015) 141-147.
16. F. Grbović, M. Stanković, F. Vukajlović, S. Branković, **Z. Simić** and M. Topuzović
„Comparative study of the accumulation of metals in the plant *Polygonum aviculare* L. from different sites in the city of Kragujevac“ Biologica Serbica, 38 (2016) 12-17.
17. S. Branković, R. Glišić, G. Đelić, M. Topuzović, **Z. Simić**, A. Milošković, V. Đekić
„Bioaccumulation of Elements in Species *Polygonum Amphibium* L. in Reservoir Gruža (Serbia)“
Water Research and Management, 7 (2017) 21-26.

International Conferences

1. R. Mihajlović, V. Vajdand, **Z. Simić**,
„Coulometric generation of H^+ ions by oxidation of hydrogen dissolved in palladium in benzonitrile and propionitrile“,
Bull. Chem. Technol. Macedonia, 7 (1989) 103-106.
2. **Z. Simić**
„Coulometric-potentiometric determination of pK_a values of bases in ethylene carbonate and dimethylsulfoxide“,
7th Symposium on Analytical and Environmental problems, SZAB, Szeged, Hungary, 2 oktober (2000), p. 229-233.
3. **Z. Simić**
„Coulometric-potentiometric determination of acids and bases in dipolar aprotic solvents“, 7th Symposium on Analytical and Environmental problems, SZAB, Szeged, Hungary, 2 oktober (2000), p. 234-238
4. **Z. Simić**
„Coulometric-potentiometric determination of acids and bases in nitrile and ketone media“, 8th Symposium on Analytical and Environmental problems, SZAB, p. 127-131, Szeged, Hungary, 1 oktober (2001).
5. M. Antonijević, **Z. Simić**, Z. Petrović,
„Coulometric-potentiometric determination of acidity of humic acids by application of natural sulphide minerals as sensors“
XX Congress of Chemists and Technologists of Macedonia, V Congress of the metallurgists of Macedonia, ACE -11-E, Ohrid, Makedonija, 17-20 September (2008).
6. J. Milivojević, M. Jelić, V. Đekić, **Z. Simić**, K. Luković,
„Pristupačni sadržaji teških metala (Fe, Mn, Zn, Cu, Ni i Pb) u odnosu na svojstva zemljišta na teritoriji grada Kragujevca“ 1st
International Scientific and specialist conference „Ecology in the service of sustainable development“ Fruška Gora, 26-28 septembar (2013).
7. J. Milivojević, M. Jelić, V. Djekić, A. Djikić, **Z. Simić**, K. Luković,
„The available contents of heavy metals compared to a soil properties in Kragujevac“, The 1st International Congress on Soil Science, XIII National Congress in soil Science, Belgrade, Serbia, September 23-26 th, (2013), p.466-476.
8. J. Milivojević, M. Jelić, V. Djekić, Lj. Bošković-Rakočević, V. Perišić, **Z. Simić**
„Cultivar-specific accumulation of iron, manganese in winter wheat grain“, XVIII International Eco-Conference 2014, p.199-207, Novi Sad, Serbia, September 24-27 th, (2014).
9. B. Šmit, **Z. Simić**, D. Ašanin, R. Pavlović
„Electrochemical selenium-initiated cyclization of alkenyl hydantoins“, The 19th International Electronic Conference on Synthetic Organic Chemistry 1-30 November (2015).
10. J. Milivojević, V. Djekić, M. Jelić, **Z. Simić**,
„Chromium (Cr) content in the aboveground portions and kernel of different small grain cultivars“ Sixth International Scientific Agricultural Symposium “Agrosym 2015”, Jahorina, Bosnia, October 15-18, (2015). p. 444-455.
11. J. Milivojević, V. Đekić, M. Jelić, **Z. Simić**, V. Perišić
„Prediction of available soil zinc using chemical extractants“ 7th International Scientific Agricultural Symposium “Agrosym 2016”, Jahorina, Bosnia, October 6-9, (2016). p. 2026-2031.
11. G. Đelić, **Z. Simić**, S. Branković
Sadržaj teških metala makrofita u akumulaciji „Međuvršje“ Prva ekološka konferencija sa međunarodnim učešćem, Smederevo, 9-10 decembar (2015). Zbornik radova p. 99-104.
12. S. Branković, G. Đelić, **Z. Simić**, R. Glišić, V. Đekić, F. Grbović, M. Marin
Bioaccumulation of metal in plant “*Matricaria Inodora* L.” XXII Savetovanje o Biotehnologiji sa međunarodnim učešćem, Čačak 10-11 mart (2017)
13. R. Mihajlović, V. Vajgand, **Z. Simić**,
„Kulometrijsko generisanje H^+ jonova u propionitrilu i benzonitrilu oksidacijom vodonika rastvorenog u paladijumu“, Fifth Yugoslav Symposium on Analytical Chemistry, Ohrid 13-17 juni (1988), EM-53.
14. R. Mihajlović, **Z. Simić**, V. Vajgand,

"Kulometrijsko generisanje H⁺ ionova anodnom oksidacijom nekih organskih jedinjenja u nitrometanu", XI Savetovanje na hemičarite i tehnologite na Makedonija, Skopje 5-7 oktombri (1989), A3-3.

15. R. Mihajlović, V. Vajgand, **Z. Simić**,

"Coulometric generation of protons by anodic oxidation of some organic compounds in nitromethane and sulfolane", Euroanalysis VII B4 P-Fr-70, Vienna, Austria, 26-31 august (1990).

16. **Z. Simić**, R. Mihajlović,

"Coulometric determination of some organic acids in acetonitrile and propionitrile", Euroanalysis IX We P103, Bologna, Italy, 1-7 september (1996).

17. R. Mihajlović, **Z. Simić**,

"Coulometric-potentiometric determination of the pK_a values of organic bases in some dipolar aprotic solvents", Euroanalysis IX We P92, Bologna, Italy, 1-7 september (1996).

18. T. Dimić, Z. Stanic, **Z. Simić**

"Metallic oxide electrodes and analytical application thereof", Euroanalysis XVI EC-11, Belgrade, Serbia 11-15 September (2011).

19. J. Milivojević, M. Jelić, V. Djekić and **Z. Simić**,

"Availability of some heavy metals (Fe, Mn, Zn, Cu, Ni, Pb) in relation to the properties of the production plots of the city of Kragujevac, Serbia" The 1st International Congress on Soil Science, XIII National Congress in Soil Science, September 23-26th (2013), Belgrade, Serbia. p. 109.

20. **Z. Simić**, Z. Stanic, J. Milivojević

"TiO₂-carbon paste electrode as a sensor for potentiometric acid-base titrations" XXIII Congress of Chemists and Technologists of Macedonia, EC-10, Ohrid, R. Macedonia, 8-11 October (2014).

21. **Z. Simić**, J. Milivojević

"Carbon paste Pb₃O₄ Ion selective electrode with the addition of polythiophene as pH sensor for potentiometric acid-base titrations" XXIII Congress of Chemists and Technologists of Macedonia, EC-11, Ohrid, R. Macedonia, 8-11 October (2014).

22. J. Milivojević, V. Djekić, M. Jelić, Lj. Bošković-Rakočević, **Z. Simić**, V. Perišić,

"Genotype specificity of winter wheat in zinc and copper accumulation in grain", Fifth International Scientific Agricultural Symposium "Agrosym 2014", Jahorina, Bosnia, October 23-26, (2014). p. 75.

23. S. Branković, R. Glišić, **Z. Simić**

"Metal accumulation of some endemic serpentinophytes in a site on Central Serbia" 6th Balkan Botanical Congress, Rijeka (Croatia), September 14-18, (2015), pp-52.

24. J. Milivojević, V. Djekić, M. Jelić, **Z. Simić**

"Chromium (Cr) content in the aboveground portions and kernel of different small grain cultivars" Sixth International Scientific Agricultural Symposium "Agrosym 2015", Jahorina, Bosnia, October 15-18, (2015), p.136.

25. **Z. Simić**, Z. Stanic

"Enargite carbon paste electrode as a sensor acid-base determination in methanol and dimethylformamide" 24th Congress of Chemists and Technologists of Macedonia 11-14 September (2016) in Ohrid, Macedonia. AC 003 p. 43.

26. **Z. Simić**, B. Šmit, J. Milivojević

"1,2,4-Trihydroxybenzene/hydroxyl-1,4-benzoquinone ion carbon paste electrode as pH sensors" 24th Congress of Chemists and Technologists of Macedonia, 11-14 September (2016) in Ohrid, Macedonia. AC 002 p. 42.

27. S. Branković, F. Grbović, G. Đelić, **Z. Simić**, M. Marin and S. Čupara

"Phytoaccumulation of metals in three different species of Šumadija region" The International Bioscience Conference and the 6th International PSU-UNS Bioscience Conference-IBSC 2016 19-21 september (2016), Novi Sad Serbia p. 58-59.

28. J. Milivojević, V. Đekić, M. Jelić, **Zoran Simić**, V. Perišić

"Prediction of available soil zinc using chemical extractants" 7th International Scientific Agricultural Symposium "Agrosym 2016", Jahorina, Bosnia, October 6-9, (2015). P-495 p. 774.

29. S. Branković, G. Đelić, **Z. Simić**, R. Glišić, V. Đekić, F. Grbović, M. Marin

Bioaccumulation of metal in plant "Matricaria Inodora L." XXII Savetovanje o Biotehnologiji sa međunarodnim učešćem, Čačak 10-11 mart (2017) zbornik radova 1. p. 441-446.

30. G. Đelić, S. Timotijević, **Z. Simić**, S. Pavlović

"Prilog proučavanja upotrebe vrsta Populus Alba L. i Populus nigra L. u fitoremedijaciji"

Druga Ekološka Konferencija sa Međunarodnim Učešćem 25-26. 11. (2016) u Smederevu, p.119-125.

31. J. Milivojević, V. Djekić, **Z. Simić**, M. Jelić, K. Luković,

"The origin and content of Ni in vertisol Serbia"

VIII International Scientific Agricultural Symposium "Agrosym 2017", Jahorina, Bosnia, October 05-08, (2017). p. 546.

32. J. Milivojević, V. Đekić, **Z. Simić**, K. Luković, V. Perišić,

"Copper Accumulation and availability in Serbian smonitza soil"

2nd International and 14th National Congress for Sustainable Soil Management, 25-28th September (2017), Novi Sad Serbia, p.94.

National Conferences

1. R. Mihajlović, D. Maljković Lj. Mihajlović **Z. Simić**
"Composition of active mud and water in the system for purification of polluted waters from the town Kragujevac", I. Regional Symposium, "Chemistry and the environment" Vrnjačka Banja (1995), (S) I_p-38, p.251-254.
2. R. Mihajlović, K. Plavšić, Lj. Mihajlović, **Z. Simić**
"Accumulation of some heavy metals in soil on the territory of the Smederevska palanka community", I. Regional Symposium "Chemistry and the environment" Vrnjačka Banja, (1995), (S) I_p-36, p.243-246.
3. R. Mihajlović, V. Vajgand, **Z. Simić**,
"Kulometrijsko generisanje H⁺ jonova anodnom oksidacijom nekih organskih depolarizatora u nitrilima", Savetovanje SHD, Beograd (1988), AH-17.
4. R. Mihajlović, V. Vajgand, **Z. Simić**,
"Kulometrijsko generisanje H⁺ jonova u nitrometanu i sulfolanu oksidacijom vodonika rastvorenog u paladijumu", XXXIII savetovanje SHD i VII sastanak hemičara Vojvodine, Novi Sad 16-18 januar (1991), AH-10p, s202.
5. R. Mihajlović, V. Vajgand, **Z. Simić**,
"Kulometrijsko generisanje D⁺ jonova u nevodnim rastvaračima oksidacijom deuterijuma rastvorenog u paladijumu", XXXV Savetovanje SHD, Beograd 18-20 januar (1993), AH-1 s108.
6. R. Mihajlović, **Z. Simić**,
"Kulometrijsko-potenciometrijsko određivanje pK_s nekih aprotičnih rastvarača, XXXVII Savetovanje SHD, Novi Sad 1-2 juni (1995), FH-32p s222.
7. Z. Stanić, J. Stepanović, **Z. Simić**,
"Electrochemical characterization and analytical application by voltametry and potentiometry", I Savetovanje SHD, AH P-1, Beograd, Srbija, 14-15 jun (2012).
8. G. Đelić, **Z. Simić**, S. Branković,
"Akumulacija i distribucija teških metala kod *Galinsoga parviflora* CAV i *Erigeron canadensis* L., invazivnih vrsta u Flori Srbije", Botanički simpozijum-Treći vek botanike u Vojvodini, Нови Сад, 15 april (2016). Knjiga sažetaka 59-60.
9. G. Đelić, S. Timotijević, **Z. Simić**, S. Branković,
"Adoption and distribution of metals in the species of genus *populus*" 12th Symposium of the Flora of Southeastern Serbia and Neighboring regions. Kopaonik 16th-19th june (2016). Book of abstract p 71.
10. S. Branković, R. Glišić, G. Đelić, M. Topuzović, **Z. Simić**, A. Milošković, V. Đekić,
"Bioaccumulation of elements in species *Polygonum* L. in reservoir Gruža (Serbia)" 46th Annual Conference of the Serbian Water Pollution Control Society "Water 2017", Vršac 6-8 jun (2017), p.71.