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(Curriculum Vitae)

dr Vladana N. Rajaković-Ognjanović, chem. eng.

Assistant Professor at Faculty of Civil Engineering, University of Belgrade

A short biography

Dr Vladana N. Rajaković-Ognjanović, born on 18th of October, 1975. in Belgrade, Serbia. After VIth Belgrade gymnasium she began studies at Faculty of Technology and metallurgy, University of Belgrade in 1994. She graduated in 1999 with average over-all grade mark 8.70, and defended her diploma thesis with grade 10, at the Department of Organic chemistry.

During studies, from August until December 1998, she had worked in Food institute “Matforsk” in Norway, as a trainee for technical experience through IAESTE organization. The work on institute was based on the development of the apparatus based on gas-sensor array called “Electronic nose” used for food sample characterization.

From 2000. until 2004. she worked in Electro-engineering institute “Nikola Tesla” as a researcher engaged in laboratory for mineral insulating oils. During this period some progressive scientific steps have been made. Within this period, from September 2001. until December 2002. she has been a visiting researcher at Ludwig-Maximilian University in Munich, Germany. This part of scientific work was devoted to nanotechnology and the development, characterization and synthesis of mesoporous materials.

From June 2004. she has become assistant at Faculty of Civil Engineering, University of Belgrade. She has been active in teaching in the following courses: Water quality, for students in their third year of studies and Environmental engineering-first course, for students in their first year of studies.

She is an author or co-author of papers in highly evaluated scientific journals (reference list is enclosed).

In June 2011 the candidate has defended her PhD thesis under title “The influence of water quality on the steel corrosion“ at Faculty of Technology and metallurgy, University of Belgrade. Since march 2012 she has become an assistant professor at Faculty of Civil engineering, at the Institute for hydrotechnics and environmental engineering.

Since December 2004 she has a Graduate Engineer’s Licence issued by Serbian Chamber of Engineers (Licence # 371 C224 05).

The candidate has been a team member of several studies and project designs (list of projects is enclosed). Projects and studies are mostly based on the field of water purification, water treatment and the improvement of environmental protection.

Important references

PhD thesis:

Vladana N. Rajaković-Ognjanović: "The impact of water quality on the steel corrosion", Faculty of Technology and metallurgy, University of Belgrade, 2011.

Papers published in international scientific journals

1. **V.N. Rajaković**, S. Mintova, J. Senker, T. Bein, Synthesis and characterization of V and Ti-substituted mesoporous molecular sieves, *Materials Science and Engineering C* (2003) 817-821.
2. **V.N. Rajaković**, D. Skala, Separation of water-in-oil emulsions by freeze/thaw method and microwave radiation, *Journal of Separation and Purification Technology* 49 (2) (2006) 192-196.
3. **V.N. Rajaković**, G. Aleksić, M. Radetić, LJ. Rajaković, Efficiency of oil removal from real wastewater with different sorbent materials, *Journal of Hazardous Materials*, 143 (1-2) (2007) 494-499.
4. **V.N. Rajaković-Ognjanović**, G. Aleksić, LJ. Rajaković, Governing factors for motor oil removal from water with different sorption materials", *Journal of Hazardous Materials*, *Journal of Hazardous Materials*, Volume 154, Issues 1-3 (1) (2008) 558-563.
5. N.B. Issa, **V.N. Rajaković-Ognjanović**, B.M. Jovanović, LJ.V. Rajaković, Determination of Inorganic Arsenic Species in Natural Waters-Benefits of Separation and Preconcentration on Ion Exchange and Hybrid Resins, *Analytica Chimica Acta*, 673 (2) (2010) 185-193.
6. **V.N.Rajaković-Ognjanović**, D.Z.Živojinović, B.N.Grgur, LJ.V.Rajaković, Improvement of chemical control in the water-steam cycle of thermal power plants, *Applied Thermal Engineering*, 31 (1) (2011) 119-128.
7. **V.N.Rajaković-Ognjanović**, B.N. Grgur B., Corrosion of austenite and ferrite stainless steel weld, *Journal of the Serbian Chemical Society*, 76 (0) (2011) 1-9 JSCS-4831.
8. D.B. Žarković, **V.N. Rajaković-Ognjanović**, LJ.V. Rajaković, Conservation of resources in the pulp and paper industry derived from cleaner production approach, *Resources, Conservation and Recycling*, 55 (2011) 1139-1145.
9. N.B. Issa, **V.N. Rajaković-Ognjanović**, A.D. Marinković, LJ.V. Rajaković, Separation and Determination of Arsenic Species in Water by Selective Exchange and Hybrid Resins, *Anal. Chim. Acta*, 706 (1) (2011) 191-198.
10. V. Vukašinović-Pešić, **V. N. Rajaković-Ognjanović**, N. Blagojević, V. Grudić, B. Jovanović, Lj. Rajaković, „Enhanced Arsenic Removal from Water by Activated Red Mud Based on Hydrated Iron(III) and Titan(IV) Oxides“, *Chemical Engineering Communications*, 199 (7) (2012) 849-864.
11. Lj. V. Rajaković, D. D. Marković, **V. N. Rajaković-Ognjanović**, D. Z. Antanasijević, „Review: The approaches for estimation of limit of detection for ICP-MS trace analysis of arsenic“, *Talanta*, 102 (2012) 79–87.

12. D. Z. Živojinović, **V. N. Rajaković-Ognjanović**, Antonije E. Onjia, Lj. V. Rajaković, „Spatial variations in the distribution of trace ionic impurities in the water-steam cycle in a thermal power plant based on a multivariate statistical approach”, Central European Journal of Chemistry, 11(9) (2013) 1456-1470 doi: 10.2478/s11532-013-0286-4.
13. Lj.V. Rajaković, Ž.N. Todorović, **V.N.Rajaković-Ognjanović**, A.E. Onjia, Review: Speciation of arsenic compounds, Journal of Serbian Chemical Society, 78(0) (2013) 1-32, JSCS-5666, doi:10.2298/JSC130315064R
14. B. M. Lekić, D.D. Marković, **V.N. Rajaković-Ognjanović**, A. R. Đukić, Lj.V. Rajaković, Arsenic Removal from Water Using Industrial By-Products, Journal of Chemistry 2013 (2013), Article ID 121024, 9 pages, dx.doi.org/10.1155/2013/121024

A team member in the following projects:

1. The fundamental projects of Ministry for science and technology, project-manager: prof. Lj.V. Rajaković, The development of analytical methods and techniques for the quality control and analysis of traces of substances, Faculty of technology and metallurgy, Belgrade (2002-2005).
2. National programme for the regulation, protection and usage of water resources in Serbia, project manager: S. Milenkovića, The improvement of methodology and model for efficient control and monitoring of water quality in watercourses, project # NPV–18A (2004-2007).
3. The fundamental projects of Ministry for science and technology, project-manager: A. Onjia, New methods and techniques for separation and speciation of traces of elements, compounds and radionuclides and identification of their sources, Institute for Nuclear Sciences, Vinca, Belgrade, project #142039 (2005-2010).
4. Project of integral and interdisciplinary researches, funded by Ministry of science and technology, project-manager: A. Onjia, New technologies for monitoring and environmental protection from the harmful chemical substances and radiation, Institute for Nuclear Sciences, Vinca, Belgrade, project # 43009 (2011-2015).
5. Project of the technological improvements funded by Ministry of science and technology, project-manager: D. Prodanovića, The systems for rainfall collection incorporated with urban and traffic infrastructure, Faculty of civil engineering, Belgrade, project # TR 37010 (2011-2015).

International projects

1. International project under the supervision of P.Jovančića: International Project: EMCO, Reduction of environmental risks, posed by Emerging Contaminants, through advanced

treatment of municipal and industrial wastes, Contract number: INCO CT 2004-509188 (2004-2006).

The collaboration with industrial companies through projects, studies and research projects:

1. Monography (in Serbian): The corrosion in thermal power plants, Books: IV, V and VI, VII, Belgrade EPS/TMF, Authors: LJ.V. Rajaković, D.Z. Čičkarić, V.N. Rajaković et al., Belgrade (2003-2005)
2. General design for central treatment plant for waste water of municipalities of Vrbas and Kula, Faculty of civil engineering, Belgrade (2004). Authors: D. Ljubisavljević, A. Đukić, V. Jelenković, D. Kos, B. Jovanović, B. Babić, V. Rajaković.
3. Study: the complete equipment, methods and practice for the laboratory for monitoring of environment (air, water and soil) for Kolubara Lazarevac, Internal publication EPS/TMF, 283 pages, Belgrade (2004). Authors: LJ. Rajaković, V. Rajaković, D. Čičkarić, I. Novaković
4. The strategic assessment of the environmental impact of detailed regulation for open pit mining and exploiting of surface pit “Veliki Crljeni”, Authors: D. Ljubisavljević, V.N. Rajaković, Faculty of civil engineering, 75 pages, Belgrade (2006).
5. Pre-feasibility study with the general design of wastewater treatment for Kostolac A and B, Authors: LJ.V. Rajaković, B.M. Jovanović, V.N. Rajaković-Ognjanović, G. Aleksić, study by Institute for transport (CIP) for Serbian Power Utility (EPS), project-manager: LJ.Rajaković, Belgrade (2009).
6. Study on the evaluation of the environmental impact of the project: Pre-treatment of industrial waste water "Metalac-ware" Ltd., Faculty of technology and metallurgy, (2009). Authors: V.N. Rajaković-Ognjanović, LJ.V. Rajaković
7. Study on the evaluation of the environmental impact of the project: General Plant Project for odour control and wastewater treatment of industrial waste water HIP Petrochemical, Authors: V.N. Rajaković-Ognjanović, LJ.V. Rajaković, TMF, (2009).
8. Study on the evaluation of the environmental impact of the project: Plant for processing radioactive waste-object "LATRANSA" and the Institute of Nuclear Sciences "Vinca"-built drawings, Authors: V.N. Rajaković-Ognjanović, LJ.V. Rajaković, TMF (2011).