



Sonja Vidojković, naučni saradnik

Adresa: IHTM, Centar za hemiju, Studentski trg 12-16, 11000 Beograd
Centar za hemiju

Telefon:

Faks:

Mobilni telefon: +3186968480

Elektronska pošta: sonjavidojkovic@chem.bg.ac.rs, sonja66yu@yahoo.com

Obrazovanje: **1992.** Diplomirani hemičar, Prirodno-matematički fakultet, Departman za hemiju, Univerzitet u Nišu
1998. Specijalizacija, Moscow Power Engineering Institute (Technical University), Moscow, Russia,
The Faculty of Thermal Power Engineering, The Department for Water and Fuel Technology
2001. Doktor tehničkih nauka, Moscow Power Engineering Institute (Technical University), Moscow, Russia,
The Faculty of Thermal Power Engineering, The Department for Water and Fuel Technology

Zvanja: **1999.** Naučni saradnik, Moscow Power Engineering Institute (Technical University), Moscow, Russia,
The Faculty of Thermal Power Engineering, The Department for Water and Fuel Technology
2005. Naučni saradnik, Srbija

Članstva u društvima: Medjunarodna organizacija za osobine vode i pare (član radne grupe za vodeno parni ciklus u energetici)
Fulbright Alumni Association of Serbia (trenutno član Upravnog odbora, bivši predsednik Nadzornog odbora)
Društvo termicara Srbije
Društvo za integritet i vek konstrukcija
Udruženje za tehnologiju vode
Udruženje stručnih i naučnih prevodila Srbije

Profesionalno iskustvo: Iskustvo u nauci:

1997-1998 Moscow Power Engineering Institute (Technical University), Moscow, Russia,
The Faculty of Thermal Power Engineering, The Department for Water and Fuel Technology,
specijalizant
1998-2001 Moscow Power Engineering Institute (Technical University), Moscow, Russia, The Faculty of
Thermal Power Engineering, The Department for Water and Fuel Technology, doktorske studije i
naučni saradnik
2005-2007 Institut za nuklearne nauke "Vinča",
2007-2008 The Pennsylvania State University, PA, USA, Fulbright Visiting Scholar (post-doctoral
award program for advanced research),
2008-2009 The Pennsylvania State University, PA, USA, postdoctoral research
2011-2012 Institut za nuklearne nauke "Vinča", Univerzitet u Beogradu
2012- Institut za hemiju, tehnologiju i metalurgiju, Univerzitet u Beogradu

Isustvo u insdustriji:

1992-1997. i 2001-2002.- Mašinska industrija Niš, MIN-Inženering, Sektor za pripremu vode
2002-2007 i 2009-2012.- Elektroprivreda Srbije

Oblasti interesovanja: vodeno parni ciklus u termoenergetici, površinske karakteristike komponenta depozita na visokim temperaturama

Znanje jezika: Engleski, Ruski i služi se Francuskim

Najznačajniji projekti: Međunarodni:

2007-2008. Projekat finansirao Department State of the U.S.A. u okviru Fulbright Visiting Scholar programa
2008-2009. Projekat finansirala National Science Foundation, U.S.A.

Republika Srbija:

- 2005-2008.** Projekat finansiralo Ministarstvo prosvete, nauke i tehnološkog razvoja Republike Srbije, Tehnološki razvoj.
- 2011-2016.** Projekat finansiralo Ministarstvo prosvete, nauke i tehnološkog razvoja Republike Srbije Srbije, Integralna i interdisciplinarna istraživanja (III43009).

Stipendije i

medjunarodna saradnja:

- 2007- 2008.** Fulbright Visiting Scholar (non-degree post-doctoral award program for advanced research), Department of State of the USA, Pennsylvania State University, PA, USA
- 2008-2009.** Postdoctoral research, Pennsylvania State University, PA, USA
- 1998-2001.** Fellowship for postgraduate study funded by Ministry of Education of Russian Federation, Moscow Power Engineering Institute (Technical University), Moscow, Russia

Izabrane publikacije: Publikovani radovi:

1. **S. Vidojkovic**, A. Onjia, A. Devecerski, N. Grahovac, A. Nastasovic, Economizer water-wall damages initiated by feedwater impurities, *Hemijska Industrija*, 68 (5) (2014) 559-563.
2. **Sonja Vidojkovic**, Antonije Onjia, Branko Matovic, Nebojsa Grahovac, Vesna Maksimovic, Aleksandra Nastasovic, Extensive Feedwater Quality Control and Monitoring Concept for Preventing Chemistry-Related Failures of Boiler Tubes in a Subcritical Thermal Power Plant, *Applied Thermal Engineering*, 59 (2013) 683-694. IF=2.739.
3. **Sonja Vidojkovic**, Victor Rodriguez-Santiago, Mark V. Fedkin, David J. Wesolowski, Serguei N. Lvov, Electrophoretic Mobility of Magnetite Particles in High Temperature Water, *Chemical Engineering Science*, 66 (2011) 4029-4035.
4. Grahovac N., Miskovic Z., Vidojkovic S., Influence of Tubes Corrosion to Reliability of Thermal Power Plants, *Material Protection*, 3 (2007) 55-59.
5. **Vidojkovic S.**, Physical-Chemical Characteristics of Water Based Environment in Thermal Power Plants and its Effect on the Structural Material, *Structural Integrity and Life*, 7(2) (2007) 105-108.
6. Petrova T.I, **Vidojkovic S.**, Zonov A.A., Petrov A. Yu., Effects of Acetic Acid on the Contamination of Saturated Steam with Sulphates and Fluorides, *Thermal Engineering*, 7 (2004) 15-18.
7. Petrova T.I., Petrov A. Yu., **Vidojkovic S.**, Palei A.O., Distribution of Sodium Sulfate Between Boiling Water and Equilibrium Saturated Steam, *Vesnik MEI*, 2 (2000) 74-78.

Saopštenja:

1. **S. Vidojkovic**, M. Rakin, B. Janackovic. A New Approach in Prevention of Deposits Formation on the Steam Generating Surfaces, Proceedings of 6th International Natural Gas, Heat and Water Conference, Croatia, Osijek 23.- 25.09. 2015, pp.42-49.
2. **Sonja Vidojkovic**, Surface Characteristics of Magnetite Particles Under Conditions of Power Plant Water Cycles: Update, Paper presented at the Meeting of the Executive Committee of the International Association for the Properties of Water and Steam, Minutes of IAPWS PCC WG Meeting, Minutes of IAPWS PCC WG Meeting, Scandinavian International Association for the Properties of Water and Steam Stockholm, Sweden, June 28-July 04, 2015, pp. 1-23. Retrieved from <http://www.iapws.org/wg.html>
3. **Sonja Vidojkovic**, Surface Characteristics of Magnetite Particles Under Conditions of Power Plant Water Cycles, Proceedings of the 16th International Conference on the Properties of Water and Steam, Delegate Handbook & Conference Abstracts, London, United Kingdom, September 1-5, 2013, The International Association for the Properties of Water and Steam, pp. 101.
4. **S. Vidojkovic**, A. Onjia, A. Nastasovic, Contribution of Electrostatic Interaction in Prevention and Controlling Deposition of Corrosion Products on Heat Exchange Surfaces, 14th YuCorr International Conference Proceedings, Tara, Serbia, April 17-20, 2012, Serbian Society of Corrosion and Materials Protection, pp. 133-136.
5. **Sonja Vidojkovic**, Victor Rodriguez-Santiago, Mark V. Fedkin, David J. Wesolowski, Serguei N. Lvov, Zeta Potential of Magnetite/Aqueous Solution Interface at Elevated Temperatures, Proceedings of the 11th International Conference on Fundamental and Applied Aspects of Physical Chemistry, Belgrade, Serbia, September 24-28, 2012, Society of Physical Chemists of Serbia, pp. 715-717.
6. **S. Vidojkovic**, A. Onjia, A. Nastasovic, Role of Electrokinetic Properties of Corrosion Products in Prevention and Controlling Deposition in Water/Steam Cycle of Thermal Power Plants, Proceedings of the

International Conference "Power Plants 2012", Zlatibor, Serbia, October 30 - November 02, 2012, Society of Thermal Engineers of Serbia, E2012-046.

7. **Sonja Vidojkovic**, Antonije Onjia, Aleksandra Nastasovic, Parameters of Feedwater Quality and Directions for Monitoring Concept Optimization to Prevent Boiler Tube Failures in Thermal Power Plants, Proceedings of the International Conference «Water Quality in the Waterwork Systems and Industry Water», Belgrade, Serbia, November 8-9, 2012, Association for Water Technology and Sanitary Engineering, pp. 193-197.

8. Majinski N, Ignjatovic R. Miroslav, **Vidojkovic S.**, Dynamic Business Environment Base, For Strategic Sustainable Enterprise Technology Development, Proceedings of 2nd International Symposium "Mining 2011", Mining Present State and Future Prospects and Sustainable Development, May 10-13, Vrnjacka Banja, Serbia, Serbian Chamber of Commerce, pp. 128-137.

9. S.N.Lvov, M.Fedkin, V.Rodriguez-Santiago, **S.Vidojkovic** and D.J.Wesolowski, Protonation Enthalpy of Magnetite from High Temperature Electrophoresis, Paper presented at the Conference on Goldschmidt 2010- Earth, Energy and the Environment, Knoxville, Tennessee, USA, June 13-18, 2010. Abstract published in *Geochemica et Cosmochimica Acta*, Vol 74, Issue 12, pp. A647-A647, Supplement 1, June 2010.

10. Ignjatovic M, **Vidojkovic S**, Majinski N, Environment Protection in Coal from Underground Exploitation for Power Plants, Proceedings of Symposium with International Participation "Air protection 2010", Air Quality and legal regulations on Environmental Protection, Subotica, Serbia, November 3-5, 2010, Serbian Chamber of Commerce, pp. 314-318.

11. V. Rodriguez-Santiago, M.V. Fedkin, **S.Vidojkovic**, D.J.Wesolowski, S.N.Lvov, Nanoelectrophoresis Studies of Magnetite and Silica in Hydrothermal Environments, Paper presented at the 19th Annual VM Goldschmidt Conference, Davos, Switzerland, June 21-26, 2009. Abstract published in *Geochimica et Cosmochimica Acta*, Vol 73, Issue13, pp.A1111-A1111, Supplement 1, June 2009.

12. **Vidojkovic S.**, Rodrigez S., Fedkin M. V., Lvov S. N., Electrophoretic Mobility and Zeta Potential of Magnetite at Temperatures Corresponding to Power Plant Operation Conditions, Paper presented at the Meeting of the Executive Committee of the International Association for the Properties of Water and Steam, Minutes of IAPWS PCC WG Meeting, Doorwerth, Netherland, September 6-12, 2009, pp.54.

13. Rodriguez S. V. **Vidojkovic S**. Fedkin M. V. Lvov S. N., Zeta Potential of Deposit Components at Elevated Temperature, 15th ICPWS Proceedings, pp.1-5, electro 06-07, Berlin, Germany, September 7-11, 2008.

14. **Vidojkovic S.**, Corrosion damage analyses in fossil plant, Paper presented at the Meeting of the Executive Committee of the International Association for the Properties of Water and Steam, Minutes of IAPWS PCC WG Meeting, Lucerne, Switzerland, August, 27-30, 2007, pp. 52.

15. **Vidojkovic S.**, Influence of Water Chemistry on the Economizer Inner Wall Condition, Paper presented at the Meeting of the Executive Committee of the International Association for the Properties of Water and Steam, Minutes of IAPWS PCC WG Meeting, Witney, United Kingdom, September 3-8, 2006, p. 53.

16. **Vidojkovich S.**, Griuc B., Interpretation of the Newest European Standard for Feedwater and Boiler Water Quality, In Proceedings of the 32st JUPITER Conference in Zlatibor, 2006, pp. 27

17. **Vidojkovic S.**, Steam Purity Control in Subcritical Power Plant, Paper presented at the Meeting of the Executive Committee of the International Association for the Properties of Water and Steam, Minutes of IAPWS PCC WG Meeting, Santorini, Greece, July 3-8, 2005, pp. 45.

18. **Vidojkovic S**. Grujic B., Application of Contemporary Standards for Quality of Steam in Turbines of Electric Power Plants, In Proceedings of the 31st JUPITER Conference in Zlatibor, 2005, pp. 32.

19. **Vidojkovich S.**, Petrova T.I., Zonov A.A., Petrov A. Yu. Effects of Acetic Acid on the Partition Coefficient of Sulfates between Boiling Water and Saturated Steam. Paper presented at the Symposium "Power Plants 2004", Vrnjacka Banja, November 2-5, 2004, Serbia and Montenegro, Society of Thermal Engineers of Serbia, pp. 103.

20. Petrova T.I., **Vidojkovic S.**, The Effect of Organic Species on the Contamination of Saturated Steam with Sulphate and Fluoride, Paper presented at the Meeting of the Executive Committee of the International Association for the Properties of Water and Steam, Minutes of IAPWS PCC WG Meeting, Vejle, Denmark, August 24-29, 2003, pp.40.

21. Petrova T.I., **Vidojkovic S**, Effect of Chemistries on the Contamination of Saturated Steam with Sulfate, Proceedings of the MEI (Moscow power Engineering Institute, Technical University) Conference on Water Treatment and Nuclear Power Plants, and Fuel Utilization, Moscow, Russia, December 14-15, 2000. MEI, Moscow, Russia, 2000, pp. 17-18. Abstract published in the Abstracts of the MEI Conference in Power Plant

Chemistry, 2 (11), 2000, p. 673 (in Germany).

22. Petrova T.I., **Vidoikovich S.** Effect of Water/Steam Regimes on the Contamination of Saturated Steam with Sulfate. MEI (Moscow Power Engineering Institute, Technical University) Conference on Chemistry in Fossil and Nuclear Power Plants, Power Plant Chemistry, 2000, Vol. 2, No. 11, p. 673.

23. Petrova T.I., **Vidoikovich S.**, Zonov A.A., Kashinsky V. J. Petrov A. Yu, Effect of Acetic Acid on Distribution of Sulfate between Boiling Water and Saturated Steam, Paper presented at the Meeting of the Executive Committee of the International Association for the Properties of Water and Steam, Minutes of IAPWS PCC WG Meeting, Prague, Czech Republic, September 3-9, 2000, pp.3.

24. **Vidoikovich S.**, Petrova T.I., Behaviour of Sulfate in Water-Steam Cycle of Power Plants, Proceedings of the 5th International Conference of Students and Post-Graduates "Radioelectronics, Electrotechnics, and Power Engineering", Moscow, Russia, March 3-5, 1999. MEI (Moscow Power Engineering Institute, Technical University), Moscow, Russia, 1999, pp. 269-270.
