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Profesionalno iskustvo    Oblasti interesovanja    Projekti    Izabrane publikacije

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**2001.** Magistar tehničkih nauka (Univerzitet u Beogradu, Tehnološko-metalurški fakultet)  
**2005.** Stručni ispit  
**2012.** Doktor tehničkih nauka (Univerzitet u Beogradu, Tehnološko-metalurški fakultet)

**Zvanja:** **1993.** Istraživač pripravnik  
**2002.** Istraživač saradnik  
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**Članstva u društvima:** Srpsko hemijsko društvo  
Društvo za keramičke materijale Srbije

**Profesionalno iskustvo:** **1992. – 1993.** Tehnološko-metalurški fakultet  
**1994. – 2013.** Institut za tehnologiju nuklearnih i drugih mineralnih sirovina (ITNMS)  
**2014. –** Institut za hemiju, tehnologiju i metalurgiju (IHTM) – Centar za elektrohemiju

**Oblasti interesovanja:** Keramički, vatrostalni i sumpor- polimerni kompozitni materijali (sinteza i karakterizacija);  
Primena nedestruktivnih metoda karakterizacije (ultrazvuk i analiza slike) tokom izlaganja materijala ekstremnim uslovima (termo šok, kavitacija i agresivna sredina);  
Ispitivanje sorpcije metala iz otpadnih industrijskih voda.

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**Znanje jezika:** Engleski, francuski, ruski

**Najznačajniji Međunarodni:**

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**Primenjena istraživanja:**

**2011. – 2015.** Implementacija savremenijih tehničko-tehnoloških i ekoloških rešenja u postojećim proizvodnim sistemima rudnika bakra Bor i rudnika bakra Majdanpek, TR 33007, Ministarstvo prosvete, nauke i tehnološkog razvoja;

**2008. – 2010.** Razvoj komercijalnih proizvoda na bazi sumpornog betona i sumpor – modifikovanog asfalta, TR 19016, Ministarstvo nauke i tehnološkog razvoja;

**2005. – 2007.** Valorizacija sekundarnog sumpora kao otpadnog materijala u rafinaciji nafte, TR 6705 B, Ministarstvo nauke i tehnološkog razvoja;

**2005. – 2007.** Eliminacija i korišćenje sumpora dobijenog kao sporedni proizvod pri preradi nafte, TD 7020 B, Ministarstvo nauke i tehnološkog razvoja;

**2002. – 2004.** Projektovanje i izrada postrojenja za primarnu preradu istrošenih uljnih emulzija, MNTR 099 B, Ministarstvo nauke i tehnološkog razvoja;

**2002. – 2004.** Razvoj tehnoloških postupaka za dobijanje staklokeramičkih i staklastih materijala, MHT 2.07.0026.B, Ministarstvo nauke i tehnološkog razvoja.

**Ostalo:**

**2012.** Sistem za ispitivanje funkcionalnih svojstava stomatoloških materijala u simuliranim realnim uslovima korišćenja-

Inovacioni projekat;

2004. Formiranje indikatora održivog razvoja Republike Srbije”, Ugovor br. 2/090, Ministarstvo za zaštitu prirodnih bogatstava i životne sredine.

#### Izabrane Monografije, poglavlja u knjigama:

- publikacije:**
1. **Milica M. Vlahović**, Predrag B. Jovanić, Sanja P. Martinović, and Tatjana D. Volkov Husović, Behavior of sulfur- polymer matrix composites with different fillers under acid and salt influence, Chapter 9 in Polymer-Matrix Composites: Types, Applications and Performance, Series: Polymer Science and Technology, Editor: Rakesh Kumar; Nova Science Publishers, Inc., New York, USA (2014) 215-240.
  2. **Milica M. Vlahović**, Sanja P. Martinović, Predrag B. Jovanić, Tamara Đ. Boljanac and Tatjana D. Volkov Husović, Image Analysis Technique for Evaluating Damage Evolution and Predicting Mechanical Strength of Concrete Structures under Corrosion Conditions, Chapter 7 in Advances in Image Analysis Research, Editor: Roger M. Echon; Nova Science Publishers, Inc., New York, USA (2014) 147- 170.
  3. S. Martinovic, **M. Vlahovic**, T. Boljanac, B. Matovic, and T. Volkov-Husovic, Implementation of Image Analysis Research on Refractory Concrete Lifetime Prediction for Thermal Stability and Cavitation Erosion Testing, Chapter 8 in Advances in Image Analysis Research, Editor: Roger M. Echon; Nova Science Publishers, Inc., New York, USA (2014) 171-186.
  4. **Milica M. Vlahović**, Predrag B. Jovanić, Sanja P. Martinović, Tamara Đ. Boljanac and Tatjana D. Volkov Husović, Influence of Chemical Stress on Sulfur-Polymer Composite Structure, Chapter 10 in New Developments in Polymer Composites Research, Editors: Stephan Laske and Andreas Witschnigg; Nova Science Publishers, Inc., New York, USA (2013) 257-278.
  5. **Milica Vlahović**, Predrag Jovanić, Scanning electron microscopy analysis of sulfur-polymer composite subjected to induced destruction, Microscopy Book Series- Number 5: Current microscopy contributions to advances in science and technology, Volume 2, Editor: Antonio Méndez-Vilas; Formatex Research Center, Spain (2012) 1171-1182.

#### Publikovani radovi:

1. Sanja Martinovic, **Milica Vlahovic**, Tamara Boljanac, Jelena Majstorovic, Tatjana Volkov Husovic, Influence of sintering temperature on thermal shock behavior of low cement high alumina refractory concrete, Composites Part B: Engineering, 60 (2014) 400-412.
2. **Milica Vlahović**, Predrag Jovanić, Sanja Martinović, Tamara Boljanac, Tatjana Volkov-Husović, Quantitative evaluation of sulfur-polymer matrix composite quality, Composites Part B: Engineering, 44 (1) (2013) 458-466.
3. Sanja Martinovic, **Milica Vlahovic**, Tamara Boljanac, Marina Dojcinovic, Tatjana Volkov Husovic, Cavitation resistance of refractory concrete: Influence of sintering temperature, Journal of the European Ceramic Society, 33 (1) (2013) 7-14.
4. **Milica Vlahović**, Maja Savić, Sanja Martinović, Tamara Boljanac, Tatjana Volkov-Husović, Use of image analysis for durability testing of sulfur concrete and Portland cement concrete, Materials and Design, 34 (2012) 346-35.
5. Sonja Milicevic, Tamara Boljanac, Sanja Martinovic, **Milica Vlahovic**, Vladan Milosevic, Biljana Babic, Removal of copper from aqueous solutions by low cost adsorbent-Kolubara lignite, Fuel Processing Technology, 95 (2012) 1-7.
6. Sanja Martinovic, **Milica Vlahovic**, Jelena Majstorovic, Branko Matovic, Tatjana Volkov-Husovic Thermal and mechanical properties of high alumina low cement castable, Metallurgical and Materials Engineering, 18 (1) (2012) 53-65.
7. **Milica Vlahovic**, Sanja Martinovic, Tamara Boljanac, Predrag Jovanic, Tatjana Volkov Husovic, Durability of sulfur concrete in various aggressive environments, Construction and Building Materials, 25 (2011) 3926–3934.
8. Sanja Martinovic, **Milica Vlahovic**, Marina Dojcinovic, Tatjana Volkov Husovic, Jelena Majstorovic, Thermomechanical properties and cavitation resistance of a high-alumina low cement castable, International Journal of Applied Ceramic Technology, 8 (5) (2011) 1115-1124.
9. Sanja Martinovic, **Milica Vlahovic**, Jelena Majstorovic, Branko Matovic, Nemanja Trifunovic, Tatjana Volkov Husovic, Modelovanje smanjenja čvrstoće vatrostalnog betona sinterovanog na 1100°C tokom ispitivanja termostabilnosti, Livarstvo, 50 (1-4) (2011) 3-13.
10. **Milica Vlahović**, Tamara Boljanac, Anđelka Branković, Velislav Vidojković, Sanja Martinović, Nataša Đorđević, The influence of filler type on the corrosion stability of the sulfur concrete, Hemijska industrija, 64 (2) (2010) 129-137.
11. Nataša Đorđević, Sanja Martinović, **Milica Vlahović**, Predrag Jovanić, Velislav Vidojković, Tamara Boljanac, Kinetics of specific surface area change using the Boltzmann model, Science of Sintering, 41 (2009) 267-274.
12. Velislav Vidojković, Anđelka Branković, Tamara Boljanac, Sanja Martinović, **Milica Vlahović**, Valorizacija bakra iz jamskih i drugih otpadnih voda cementacijom na aluminijumu, Reciklaža i održivi razvoj, 1 (1) (2008) 28-34.
13. Tamara Boljanac, **Milica Vlahovic**, Sanja Martinovic, Velislav Vidojkovic, Preparation of lightweight sintered aggregate based on combustion ash, INTERCERAM, 56 (6) (2007) 436-439.
14. Sanja Martinović, **Milica Vlahović**, Velislav Vidojković, Tamara Boljanac, Predrag Jovanić, Optimization of non-transparent non-crystal silica production process, Journal of Metallurgy-JoM, 13 (1) (2007) 21-26.

15. Sanja Martinović, **Milica Vlahović**, Tamara Boljanac, Ljubica Pavlović, Preparation of filter aids based on diatomites, *International Journal of Mineral Processing*, 80 (2-4) (2006) 255-260.
16. Sanja Martinović, **Milica Vlahović**, Tamara Boljanac, Predrag Jovanić, Analyses of nonstationary melting process, *American Ceramic Society Bulletin*, 85 (9) (2006) 9101-9108.
17. Velislav Vidojković, Nataša Đorđević, Tamara Boljanac, **Milica Vlahović**, Sanja Martinović, Ispitivanje mogućnosti vezivanja čestica letećeg pepela iz termoelektrana elementarnim sumporom, *Hemijska industrija*, 60 (5-6) (2006) 144-147.

#### Patenti:

1. Predrag Jovanić, **Milica Vlahović**, Institut za multidisciplinarna istraživanja (nosilac), Uređaj za ispitivanje funkcionalnih osobina stomatoloških materijala; Upisan u registar malih patenata Zavoda za intelektualnu svojinu pod brojem 1311, objava u *Glasniku intelektualne svojine* 2/2013.
2. Velislav Vidojković, Nataša Đorđević, Tamara Boljanac, **Milica Vlahović**, Sanja Martinović, Anđelka Branković, Postupak hlađenja istopljenog sumpora modifikovanog diciklopentadienom na ravnoj metalnoj podlozi; Upisan u registar patenata Zavoda za intelektualnu svojinu pod brojem 53412, objava u *Glasniku intelektualne svojine* 5/2014.
3. Velislav Vidojković, Nataša Đorđević, **Milica Vlahović**, Tamara Boljanac, Sanja Martinović, Vezivanje letećeg pepela iz termo-elektrana elementarnim sumporom dobijenim u procesu rafinacije nafte; Upisan u registar patenata Zavoda za intelektualnu svojinu pod brojem 52159, objava u *Glasniku intelektualne svojine* 2012/4.

#### Tehnološka rešenja:

1. Velislav Vidojković, Tamara Boljanac, **Milica Vlahović**, Sanja Martinović, Nataša Đorđević, Anđelka Branković, Tehnološki postupak dobijanja sumpor-modifikovanog asfalta; Novi tehnološki postupak, ITNMS, Beograd, Odluka NV I-27 (2010.).
2. **Milica Vlahović**, Velislav Vidojković, Tamara Boljanac, Nataša Đorđević, Sanja Martinović, Anđelka Branković, Tehnološki postupak izlivanja podova i dobijanja dekorativnih ploča od sumpornog betona, Novi tehnološki postupak; ITNMS, Beograd, Odluka NV I-7 i I-9 (2009.).
3. Velislav Vidojković, Anđelka Branković, Nataša Đorđević, Tamara Boljanac, Sanja Martinović, **Milica Vlahović**, Tehnološki postupak dobijanja cevi od sumpornog betona; Novi tehnološki postupak, ITNMS, Beograd, Odluka NV I-8 (2009.).

#### Predavanja po pozivu:

1. **Milica Vlahović**, Sanja Martinović, Jelena Majstorović, Tatjana Volkov Husović, Assessment of sulfur-polymer composite quality based on nondestructive testing; The 46th International October Conference on Mining and Metallurgy; 01- 04 October 2014, Bor Lake, Bor (Serbia); Proceedings: 40-43.
2. **Milica Vlahović**, Low cement concrete: composition, properties and application, ROSOV Pin 2014, Second regional roundtable: refractory, process industry and nanotechnology, Book of abstracts: 38-39.

#### Saopštenja:

1. Sanja Martinović, **Milica Vlahović**, Jelena Majstorović, Tatjana Volkov Husović, Analysis of refractory castables subjected to thermal shock by non-destructive methods, The 46<sup>th</sup> International October Conference on Mining and Metallurgy, 01-04 October 2014, Bor Lake, Bor (Serbia), Proceedings: 585-588.
2. **Milica Vlahovic**, Sanja Martinovic, Tamara Boljanac, Sonja Milicevic, Adsorption properties of TENT fly ash in removal of copper from wastewater, The 45th International October Conference on Mining and Metallurgy, 16-19 October 2013, Bor Lake, Bor, Proceedings: 439-442.
3. Sanja Martinovic, Tamara Boljanac, **Milica Vlahovic**, Tatjana Volkov Husovic, Anisotropy of refractory concrete subjected to the thermal shock by using the surface analysis, The 45th International October Conference on Mining and Metallurgy, 16-19 October 2013, Bor Lake, Bor, Proceedings: 435-438.
4. Tamara Boljanac, Sanja Martinovic, **Milica Vlahovic**, Removal of copper, cadmium, and zinc from the mine wastewater in RTB Bor by low cost adsorbent fly ash, The 45th International October Conference on Mining and Metallurgy, 16-19 October 2013, Bor Lake, Bor, Serbia, Proceedings: 431-434.
5. **Milica Vlahovic**, Sanja Martinovic, Tamara Boljanac, Ljubisa Andric, Adsorption isotherms of removing copper from aqueous solutions by low cost adsorbent-lignite, XV Balkan Mineral Processing Congress, Sozopol, Bulgaria, 2013, **Proceedings**: 994-997.
6. Sanja Martinovic, **Milica Vlahovic**, Tamara Boljanac, Ljubisa Andric, Kinetics of copper adsorption from wastewater by lignite, XV Balkan Mineral Processing Congress, Sozopol, Bulgaria, 2013, **Proceedings**: 998-1001.
7. Sonja Milicevic, Vladan Milosevic, **Milica Vlahovic**, Sanja Martinovic, Dragan Povrenovic, Concentration method for the mining wastewater-valorization of the copper, International Science Conference Reporting for Sustainability, 2013,

- Becici, Montenegro, **Proceedings**: 431-436.
8. **Milica Vlahović**, Sanja Martinović, Tamara Boljanac, Jelena Majstorović, Tatjana Volkov Husović, Application of ultrasonic measurements on durability testing of sulfur concrete, 9<sup>th</sup> Scientific/Research Symposium with International Participation „Metallic and Nonmetallic Materials“ Zenica, B&H, 23-24. April 2012, Proceedings: 311-316.
  9. Sanja Martinović, **Milica Vlahović**, Tamara Boljanac, Jelena Majstorović, Tatjana Volkov Husović, Modeling of strength degradation during thermal stability testing of refractory castable, 9<sup>th</sup> Scientific/Research Symposium with International Participation „Metallic and Nonmetallic Materials“ Zenica, B&H, 23-24. April 2012, Proceedings: 329-334.
  10. Tatjana Volkov Husović, Sanja Martinović, **Milica Vlahović**, Jelena Majstorović, Branko Matović, Possibilities of using non destructive testing methods in thermal shock characterization of refractory castable, 9<sup>th</sup> Scientific/Research Symposium with International Participation „Metallic and Nonmetallic Materials“ Zenica, B&H, 23-24. April 2012, Proceedings: 3-12.
  11. Sonja Milićević, Vladan Milošević, Dragan Povrenović, Sanja Martinović, **Milica Vlahović**, Tamara Boljanac, Hydrophobization of the Mineral Surface, 44th International October Conference on Mining and Metallurgy, Bor, Serbia, 1-3 October 2012, Proceedings: 643-648.
  12. Stepanović M., **Vlahović M.**, Stanković D., Jovanić P. WEEE management: case study Serbia, 3rd International Conference on Industrial and Hazardous Waste Management, Chania, Crete, Greece, 12-14 September 2012, Proceedings: 842-848.
  13. **Milica Vlahovic**, Sanja Martinovic, Tamara Boljanac, Predrag Jovanic, Tatjana Volkov Husovic, Assessment of sulfur concrete corrosion resistance, 43<sup>rd</sup> International October Conference on Mining and Metallurgy, Kladovo, Serbia, 12-15 October 2011, Proceedings: 370-373.
  14. **Milica Vlahovic**, Sanja Martinovic, Tamara Boljanac, Tatjana Volkov Husovic, Strength degradation modeling based on non-destructive testing, 43<sup>rd</sup> International October Conference on Mining and Metallurgy, Kladovo, Serbia, 12-15 October 2011, Proceedings: 366-369.
  15. **Milica Vlahovic**, Sanja Martinovic, Tamara Boljanac, Sonja Milicevic, Vladan Milosevic, Influence of adsorbent amount and initial solution concentration on copper removal, 43<sup>rd</sup> International October Conference on Mining and Metallurgy, Kladovo, Serbia, 12-15 October 2011, Proceedings: 362-365.
  16. Sanja Martinovic, **Milica Vlahovic**, Marina Dojcinovic, Tatjana Volkov-Husovic, Implementation of image analysis on study of refractory concrete resistance, 43<sup>rd</sup> International October Conference on Mining and Metallurgy, Kladovo, Serbia, 12-15 October 2011, Proceedings: 350-353.
  17. Sanja Martinovic, **Milica Vlahovic**, Jelena Majstorovic, Tatjana Volkov-Husovic Mechanical properties of alumina based low cement castable: influence of heating temperature, 43<sup>rd</sup> International October Conference on Mining and Metallurgy, Kladovo, Serbia, 12-15 October 2011, Proceedings: 354-357.
  18. Sanja Martinovic, **Milica Vlahovic**, Tamara Boljanac, Sonja Milicevic, Vladan Milosevic, Removal of copper from aqueous solutions by low cost adsorbent-lignite: influence of pH and contact time, 43<sup>rd</sup> International October Conference on Mining and Metallurgy, Kladovo, Serbia, 12-15 October 2011, Proceedings: 358-361.
  19. M. Stepanovic, **M. Vlahovic**, P. Jovanic, Integrated treatment of the generated waste streams on the Derdap dam, Thirteenth International Waste Management and Landfill Symposium, Sardinia, 3-7 October 2011, Proceedings: 256-262.
  20. **Milica Vlahović**, Velislav Vidojković, Sanja Martinović, Tamara Boljanac, Radmila Jančić Heinemann, Tatjana Volkov Husović, Corrosion resistance of sulfur concrete in acidic solution, 42<sup>nd</sup> International October Conference on Mining and Metallurgy, Kladovo, Serbia, 10-13 October 2010, Proceedings: 102-105.
  21. Sanja Martinović, **Milica Vlahović**, Marija Dimitrijević, Jelena Majstorović, Velislav Vidojković, Tatjana Volkov Husović, Effect of anisotropy on thermal shock behavior of low cement high alumina castable, 42<sup>nd</sup> International October Conference on Mining and Metallurgy Kladovo, Serbia, 10-13 October 2010, Proceedings: 187-190.
  22. Stepanović M., **Vlahović M.**, Jovanić P., Optimization of the inorganic adsorbents content for the used oil emulsion treatment at the Đerdap dam, 2nd International Conference on Hazardous and Industrial Waste Management, Chania, Crete, Greece, 5-8 October 2010, Full paper on CD.
  23. Sanja Martinović, **Milica Vlahović**, Jelena Majstorović, Tatjana Volkov Husović, Fracture resistance parameters and water quench test of low cement high alumina castable, 41th International October Conference on Mining and Metallurgy, Kladovo, Serbia, 4-6 October 2009, Proceedings: 653-658.
  24. Velislav Vidojković, **Milica Vlahović**, Sanja Martinović, Tamara Boljanac, Natasa Djordjević, Waste sulfur modification for use in concretes, 18<sup>th</sup> International Congress of Chemical and Process Engineering (CHISA 2008), 24-28 August 2008, Praha, Czech Republic, Proceedings on CD.
  25. Natasa Djordjević, **Milica Vlahović**, Sanja Martinović Velislav Vidojković, Tamara Boljanac, Mechanochemical activation influence on the synthesis of 2MgO-2Al<sub>2</sub>O<sub>3</sub>-5SiO<sub>2</sub> ceramics, 18<sup>th</sup> International Congress of Chemical and Process Engineering (CHISA 2008), 24-28 August 2008, Praha, Czech Republic, Proceedings on CD.
  26. Velislav Vidojković, Tamara Boljanac, Sanja Martinović, **Milica Vlahović**, Andjelka Branković, Kinetics of copper

- cementation on aluminium foils, 39<sup>th</sup> International October Conference on Mining and Metallurgy, 07-10 October 2007, Sokobanja, Proceedings: 358-364.
27. **Milica Vlahović**, Sanja Martinović, Predrag Jovanić, Tamara Boljanac, Velislav Vidojković, Mechanochemical activation of mixtures for low-melting glasses production, European Congress of Chemical Engineering (ECCE-6), 16-20 September 2007, Copenhagen, Danmark, Proceedings on CD.
  28. Sanja Martinović, Predrag Jovanić, **Milica Vlahović**, Tamara Boljanac, Velislav Vidojković, Control and track of melting process by QVI, European Congress of Chemical Engineering (ECCE-6), 16-20 September 2007, Copenhagen, Danmark, Proceedings on CD.
  29. **Milica Vlahović**, Sanja Martinović, Tamara Boljanac, Velislav Vidojković, Valorization of combustion ash for preparation of lightweight aggregate, XII Balcan Mineral Processing Congress (BMPC 2007), 10-14 June 2007, Delphi, Greece, Proceedings on CD: 627-630.
  30. Sanja Martinović, **Milica Vlahović**, Tamara Boljanac, Velislav Vidojković, Predrag Jovanić, Valorization of used catalysts from oil refinery, XII Balcan Mineral Processing Congress (BMPC 2007), 10-14 June 2007, Delphi, Greece, Proceedings on CD: 611-614.
  31. Tamara Boljanac, **Milica Vlahović**, Sanja Martinović, Velislav Vidojković, Removing of sub-micro ash particles by sulfur agglomeration, XII Balcan Mineral Processing Congress (BMPC 2007), 10-14 June 2007, Delphi, Greece, Proceedings on CD: 595-598.
  32. **Milica Vlahović**, Sanja Martinović, Tamara Boljanac, Velislav Vidojković Application of hydro-isolating and anticorrosive coatings based on secondary sulfur, 4<sup>th</sup> Balcan Conference on Metallurgy, 27-29 September 2006, Zlatibor, Proceedings: 301-304.
  33. Sanja Martinović, **Milica Vlahović**, Tamara Boljanac, Predrag Jovanić, Optimization of non-transparent non-crystal silica production process, 4<sup>th</sup> Balcan Conference on Metallurgy, 27-29 September 2006, Zlatibor, Proceedings: 189-194.
  34. Tamara Boljanac, Velislav Vidojković, **Milica Vlahović**, Sanja Martinović, Sulfur agglomeration of power-plant ashes and removing of sub-micro ash particles, 4<sup>th</sup> Balcan Conference on Metallurgy, 27-29 September 2006, Zlatibor, Proceedings: 305-309.