



Curriculum Vitae

Name and family name: **Vesna Kovačević**

Research or academic title: **Assistant Professor**

Institution: University of Belgrade, Faculty of Physics, Studentskitrg 12,
11000 Belgrade, Serbia

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Links to public pages:

<https://orcid.org/0000-0002-8575-1668>

<https://scholar.google.com/citations?user=whPxZ2sAAAAJ&hl=en>

<https://www.scopus.com/authid/detail.uri?origin=AuthorProfile&authorId=55315993000&zone=>



Education

2018 PhD in Physics of Plasmas, University of Belgrade, Faculty of Physics

2007 Graduate studies in Physics, University of Belgrade, Faculty of Physics

Employment

2020 – present Assistant Professor, University of Belgrade, Faculty of Physics

2019 – 2020 Teaching Assistant with PhD, University of Belgrade, Faculty of Physics

2013 – 2019 Teaching Assistant, University of Belgrade, Faculty of Physics

2012 – 2013 Research assistant, University of Belgrade, Faculty of Physics

2009 – 2012 Junior research assistant, University of Belgrade, Faculty of Physics

2008 – 2009 PhD Fellowship, University of Belgrade, Faculty of Physics

Research field/ area

-Diagnostics of nonthermal plasma and electrical gas discharges (dielectric barrier discharge-DBD, plasma jet); Application of nonthermal plasma sources at atmospheric pressure for environmental problems (treatment of waste water, treatment of emission gases); Diagnostics of plasma-liquid interaction; Biomedical applications of nonthermal plasma; Optical emission spectroscopy; Absorption spectroscopy; Plasma Chemistry in gases and liquids.

- Fields of specialization: Diagnostics of nonthermal plasmas (DBD and plasma jets) in contact with liquid, study of discharge development and generation of reactive species in gases and liquids. Application of DBDs for treatment of polluted water and polluted air.

She is collaborating with: Leibniz Institute for Plasma Science and Technology (INP) Greifswald, Germany; LPP, Ecole Polytechnique, Paris; Department of Chemical Sciences, University of Padua, Italy; University of Technology in Eindhoven, The Netherlands; GREMI Laboratory, University of Orleans, France; B I . Stepanov Institute of Physics of the NASB Belarus; Zhejiang University, Hangzhou, China.

Publications and Citations

She published 20 papers in international journals and more than 50 contributions in international conference proceedings. She gave 2 invited talks at international conferences.

Citations (from SCOPUS on 29.03.2023): 733

Hirsch index: 13



List of selected publications

1. Kovačević V. V., Sretenović G. B., Obradović B. M., Kuraica M. M. Low-temperature plasmas in contact with liquids—a review of recent progress and challenges *J. Phys. D: Appl. Phys.* 55 (2022) 473002
2. G. B. Sretenović, P. S. Iskrenović, V. V. Kovačević, M. M. Kuraica, Two competing mechanisms of plasma action on a jet flow, *Applied Physics Letters* 118 (2021) 124102
3. A. Sobota, O. Guaitella, G. B. Sretenović, V. V. Kovačević, E. Slikboer, I. B. Krstić, B. M. Obradović, M M Kuraica, Plasma-surface interaction: Dielectric and metallic targets and their influence on the electric field profile in a kHz AC-driven He plasma jet, *Plasma Sources Science and Technology* 28 (2019) 045003
4. Kovačević V V, Sretenović G B, Slikboer E, Guaitella O, Sobota A and Kuraica M M, The effect of liquid target on a nonthermal plasma jet – imaging, electric fields, visualization of gas flow and optical emission spectroscopy *J. Phys. D. Appl. Phys.* 51 (2018) 65202
5. Kovačević V V, Dojčinović B P, Jović M, Roglić G M, Obradović B M and Kuraica M M, Measurement of reactive species generated by dielectric barrier discharge in direct contact with water in different atmospheres *J. Phys. D. Appl. Phys.* 50 (2017) 155205
6. Sobota A, Guaitella O, Sretenović G B, Krstić I B, V V Kovačević V V, Obrusník A, Nguyen Y N, Zajíčková L, Obradović B M and Kuraica M M, Electric field measurements in a kHz-driven He jet - the influence of the gas flow speed *Plasma Sources Sci. Technol.* 25 (2016) 065026
7. Marković M, Jović M, Stanković D, Kovačević V, Roglić G, Gojgić-Cvijović G, Manojlović D, Application of non-thermal plasma reactor and Fenton reaction for degradation of ibuprofen *Sci. Total Environ.* 505 (2015) 1148-1155
8. Brandenburg R, Kovačević V V, Schmidt M, Basner R, Kettlitz M, Sretenović G B, Obradović B M, Kuraica M M and Weltmann K-D, Plasma-Based Pollutant Degradation in Gas Streams: Status, Examples and Outlook *Contrib. to Plasma Phys.* 54 (2014) 202–214
9. Sretenović G B, Krstić I B, Kovačević V V, Obradović B M and Kuraica M M, Spectroscopic measurement of electric field in atmospheric-pressure plasma jet operating in bullet mode *Appl. Phys. Lett.* 99 (2011) 161502

List of relevant previous projects or activities

- 2020-2021 Project of bilateral collaboration between Serbia and France (LPP, Ecole Polytechnique) – “Plasma activated conversion of CO₂” (PI)
- 2011-2019 Diagnostics and optimization of plasma sources important for applications, funded by Ministry of Education, Science and Technological development of the Republic of Serbia (MEST) (Participant)
- 2016-2017 Project of bilateral collaboration between Serbia and France – “Cross E-field: complementary advanced diagnostics of E-field in cold atmospheric plasma jets for biological and medical applications” (Participant)
- 2016-2017 Project of bilateral collaboration between Serbia and Germany – “Novel diagnostic methods on plasma jets” (Participant)
- 2014-2015 Project of bilateral collaboration between Serbia and Germany – “Studies of the physical and chemical processes in non-equilibrium atmospheric pressure plasmas by advanced volume and surface diagnostics” (Participant)



Other academic and research activities (honors, awards, scholarships, committees, journal reviewers, etc.)

PhD Fellowship of Ministry of Education, Science and Technological development of the Republic of Serbia

September – December 2011 research stay at Leibniz Institute for Plasma Science and Technology, Greifswald (Germany) under supervision of Prof. Ronny Brandenburg, grant from INP project

Reviewer for international scientific journals (Plasma Sources Science and Technology, Plasma Chemistry and Plasma Processing, IEEE Transactions on Plasma Science, Physics of Plasmas, AIP Advances) and Czech Science Foundation. Project reviewer for Ministry of Education, Science and Technological development of the Republic of Serbia.

Member of the organizing committee of international conferences (FLTPD XII 2017, 28th SPIG 2016, 4th CESPC 2011, 25th SPIG 2010) and XII Congress of Serbian Physicists 2013

Member of the Serbian Physical Society