



Curriculum Vitae

Name and family name: **Bratislav Obradović**

Research or academic title: **Full professor**

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

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Links to public pages:

<https://orcid.org/0000-0002-3221-7779>

<https://scholar.google.com/citations?user=4S08y9YAAAAJ&hl=en&oi=ao>

<https://www.scopus.com/authid/detail.uri?origin=AuthorProfile&authorId=6602162822&zone=>



Education

2007 PhD in Gas discharge physics, University of Belgrade, Faculty of Physics

2001 Master thesis in Gas discharge physics, University of Belgrade, Faculty of Physics

1993 Graduate studies in Physics, University of Belgrade, Faculty of Physics

Employment

2018 – present Full Professor, University of Belgrade, Faculty of Physics

2013 - 2018 Associate Professor, University of Belgrade, Faculty of Physics

2007 - 2013 Assistant Professor, University of Belgrade, Faculty of Physics

2002 – 2007 Teaching Assistant, University of Belgrade, Faculty of Physics

Research field/ area

More than twenty years of continuous work on design, construction, diagnostics and applications of gas discharges at low and atmospheric pressure; Optical emission spectroscopy; Electric field measurements based on Stark polarization spectroscopy; Nonthermal plasma sources; Dielectric barrier discharges and their applications; Low-temperature plasma spectroscopy; Magneto plasma compressor (MPC) and plasma accelerators;

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

Publications and Citations

He published about 70 papers in international journals and more than 100 contributions in international conference proceedings.

Citations (from SCOPUS on 28.03.2023.): 1916

Hirsch index: 25



List of selected publications

1. Ivković, S.S., Cvetanović, N., Obradović, B.M., Experimental study of gas flow rate influence on a dielectric barrier discharge in helium, *Plasma Sources Science and Technology*, 2022, 31(9), 095017
2. 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.* 2022, 55, 473002
3. Pejić B.M., Kramar A.D., Obradović B.M., Kuraica M.M., Žekić A.A., Kostić M. M. Effect of plasma treatment on chemical composition, structure and sorption properties of lignocellulosic hemp fibers (*Cannabis sativa L.*), *Carbohydrate Polymers*, 2020, 236, 116000
4. L Wang, N Cvetanović, B Obradović, G Dinescu, C Leys, AY Nikiforov, Investigation of atmospheric pressure RF discharge with coexisting α and γ -modes, *Plasma Sources Science and Technology*, 2019, 28 (5), 055010
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.*, 2017, 50, 155205
6. Zdeněk Navrátil, Raavo Josepson, Nikola Cvetanović, Bratislav Obradović, Pavel Dvořák, Electric field development in γ -mode radiofrequency atmospheric pressure glow discharge in helium, *Plasma Sources Science and Technology*, 2016, 25 (3), 03LT01
7. Obradović, B M, Ivković, S S, Cvetanović, N and Kuraica, M M, Study of the dynamics of a barrier hollow-cathode discharge using a broadened $H\alpha$ line, *Plasma Sources Sci. Technol.* 2014, 23, 015021
8. Sretenovic, G.B., Krstic, I.B., Kovacevic, V.V., Obradovic, B.M., Kuraica, M.M., Spectroscopic study of low-frequency helium dbd plasma jet, *IEEE Transactions on Plasma Science*, 2012, 40 (11), 6327682
9. Dojčinović B. P., Roglić G. M., Obradović B. M., Kuraica M. M., Kostić M. M., Nešić J. Manojlović D. D. Decolorization of reactive textile dyes using water falling film dielectric barrier discharge, *Journal of Hazardous Materials*, 2011, 192(2), pp. 763–771
10. Obradović, B.M., Sretenović, G.B., Kuraica, M.M., A dual-use of DBD plasma for simultaneous NO_x and SO₂ removal from coal-combustion flue gas, *Journal of Hazardous Materials*, 2011, 185(2-3), pp. 1280–1286
11. Obradović, B.M., Ivković, S.S., Kuraica, M.M., Spectroscopic measurement of electric field in dielectric barrier discharge in helium, *Applied Physics Letters*, 2008, 92 (19), 191501
12. Dojčinović, I.P., Kuraica, M.M., Obradović, B.M., Cvetanović, N., Purić, J., Optimization of plasma flow parameters of the magnetoplasma compressor, *Plasma Sources Science and Technology*, 2007, 16 (1), art. no. 010, pp. 72-79.
13. Obradović, B.M., Kuraica, M.M. Optogalvanic effect and measurement of gas temperature in an abnormal glow discharge, *Applied Physics Letters*, 2006, 89(13), 131502
14. Kuraica, M.M., Obradović, B.M., Manojlović, D., Ostojić, D.R., Purić, J. Ozonized water generator based on coaxial dielectric-barrier-discharge in air, *Vacuum*, 2004, 73(3-4), pp. 705–708



List of relevant projects or activities

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)

2006-2010: Spectroscopic diagnostics of plasma in the sources relevant to the application, funded by 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” (PI)

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.)

President of the Serbian Physical Society

Head of the Laboratory for laser physics

Management committee member of COST action TD1208 Electrical Discharges with Liquids for Future Applications

He is a project leader of three international (bilateral) research projects.

Reviewer for international scientific journals (Plasma Sources Science and Technology, Journal of Physics D: Applied Physics, Journal of Applied Physics, Contributions to Plasma Physics, Plasma Chemistry Plasma Processing, Plasma Processes and Polymers, etc.), Project reviewer for Ministry of Education, Science and Technological development of the Republic of Serbia.

Member of Scientific committee of Summer School and International Symposium on the Physics of Ionized Gases

Participated in organization of about ten international conferences as chair or member of local organizing committee.