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Curriculum Vitae

First name(s) / Surname(s) **ROSEN IVANOV**

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Positions (at moment)

Dates 2017→

Occupation or position held **Ch. assist. professor**

Name and address of employer University of Mining and Geology

Dates 2013 - 2017

Occupation or position held **Assistant professor**

Name and address of employer University of Mining and Geology

Education and training

Dates 2014 - 2017

Title of qualification awarded PhD

Educational institution University of mining and geology

Dates 2006 - 2012

Title of qualification awarded Ecology and environmental protection, Master

Educational institution University of mining and geology,

Mother tongue(s) **Bulgarian**

Other language(s) **Russian, English**

Self-assessment	Understanding				Speaking				Writing	
European level (*)	Listening		Reading		Spoken interaction		Listening		Reading	
Russian	B1	Working level	B1	Working level	B1	Working level	B1	Working level	B1	Working level
English	B1	Working level	B1	Working level	B1	Working level	B1	Working level	B1	Working level

(*)Common European Framework of Reference for Languages

Professional information and applications

Professional and Research interests (key words) Bio-electrochemical systems for environmental protection

Patents and Inventions

Membership of professional and trade organization

Publications (for last 5 year) 28 publications in the field of biotechnology and ecology

Appendix 1

Projects 4 projects

(for last 5 year)

Appendix 2

Participation in scientific sessions, conferences and congresses (for last 5 year)

Specialization abroad (for last 5 year)

Other professional skills

Appendix 1

PUBLICATIONS

2013-2024

1. Bratkova S., Angelov A., Loukanov A., Nikolova K., Plochev S. and Ivanov R., 2012, Biotechnological removal of heavy metals from mining wastewaters by dissimilative suphate reduction, International scientific symposium Universitaria Simpro, University of Petroshani, October 11-14.2012, ISSN: 1842-4449
2. Bratkova S., Ivanov R., Loukanov A., Angelov A., 2013, Potential for selective precipitation of copper ions by biogenic hydrogen sulfide from mine waters containing high concentrations of iron, Sustainable development, 9, 56-60., ISSN: 1344-4138
3. Plochev S., Angelov A., Bratkova S., Ivanov R., 2013, Modeling of the contaminants diffusion in groundwaters in the area of TMFS, Analele Universitatii "Constantin Brancisu" din Targu Jiu 3, 139-143. ISNN: 1842-4856
4. Bratkova S., Ivanov R., Angelov A., 2014, Performance of microbial fuel cell integrated in anaerobic cell for mine water treatment, First National Conference of Biotechnology, 17-18 October, Sofia,
5. R. Ivanov, P. Genova, S. Bratkova, A. Angelov "Application of constructed wetlands in domestic wastewater treatment", Proceedings of National scientific and technical conference with international participation "Automation in mining industry and metallurgy", BULCAMC`14, 06-07 November 2014, 139-143, ISSN 1314-4537
6. П. Генова, А. Ангелов, Р. Иванов, С. Плочев „Актуални проблеми при третиране на инфилтрати от депа за твърди битови отпадъци», Национална научно техническа конференция с международно участие "Автоматизация в минната индустрия и металургията", БУЛКАМК`14, 06 – 07 ноември 2014, стр. 139 – 143, ISSN 1314-4537
7. Svetlana Bratkova, Rosen Ivanov, Anatoliy Angelov, Katerina Nikolova, 2015, The influence of hydraulic retention time on the performance of microbial fuel cell integrated in successive alkalinity-producing system, Proceedings of XVI Balkan Mineral Processing Congress, Belgrade, Serbia, June 17-19.2015, Volume II, 795-800, ISBN 978-86-82673-11-8 (MI)
8. Rosen Ivanov, Svetlana Bratkova, Anatoliy Angelov, 2016, Analysis of the sediment microbial fuel cells operation, planted with different vegetation, Annual of the University of Mining and geology "St. Ivan Rilski", Mining and Mineral processing, Vol. 59, Part II, 147 – 151, ISSN 1312-1820
9. Rosen Ivanov, Svetlana Bratkova, Anatoliy Angelov, Katerina Nikolova, 2016, Influence of various microbial processes in the anodic area on the effectiveness of plant sediment microbial fuel cell, CONFERENG 2016, University of Targu Jiu "Constantin Brancusi", November 4-5, ISSN 1842-4856
10. Rosen Ivanov, Svetlana Bratkova, Anatoliy Angelov, 2016, Analysis of the efficiency of microbial fuel cells based on sulfate-reduction process, integrated in anaerobic wetlands, Annual of Sofia University "St. Kliment Ohridski, Faculty of Biology, Book 4, Volume 102, Youth Scientific Conference "Kliment`s days", Sofia
11. Petia Genova, Svetlana Bratkowa, Anatoliy Angelov, Katerina Nikolova and Rosen Ivanov, 2017, Influence of concentrations of ammonium nitrogen and activated in sequencing batch reactors on the rate of nitrogen removal, SUSTAINABLE DEVELOPMENT, Year VII Volume 2, p. 58 – 63
12. S. Bratkova, R. Ivanov. M. Gerginova, N. Peneva, A. Angelov, Z. Alexieva, 2017, Rhizosphere microflora of sediment plant microbial fuel cells, VII International Conference on Environmental, Industrial and Applied Microbiology, BioMicroWorld 2017, Madrid (Spain), 18 – 20 October
13. Svetlana Bratkova, Silviya Lavrova, Anatoliy Angelov, Katerina Nikolova, Rosen Ivanov, Bogdana Kumanova, 2018, Treatment of wastewaters containing Fe, Cu, Zn and As by microbial hydrogen sulphide and subsequent removal of COD, N and P, Journal of Chemical Technology and Metallurgy, 53, 245 – 257
14. S. Bratkova,·Z. Alexieva, A. Angelov,·K. Nikolova, P. Genova, **R. Ivanov**, M. Gerginova, N. Peneva, V. Beschkov, Efciency of microbial fuel cells based on the sulfate reduction by lactate and glucose, International Journal of Environmental Science and Technology , https://doi.org/10.1007/s13762-019-02223-8 Impact factor 2.037

15. **Rosen Ivanov**, Kaerina Nikolova, Petia Genova, 2019, Investigation of the design of plant sediment microbial fuel cell on the electrical parameters and the water treatment effect from petroleum products, International Scientific Journal "Machines, Technologies, Materials" ISSN 1313-0226, стр. 550 - 553.
16. **Rosen Ivanov**, Svetlana Bratkova, Katerina Nikolova, Petia Genova, 2019, Influence of various biological factors on the treatment of water contaminated with petroleum products and electrical parameters in plant sediment microbial fuel cells, Annals of the "Constantin Brancusi" University of Targu Jiu ISSN 1842-4856
17. **Rosen Ivanov**, Anatoiy Angelov, Ani Stefanova, 2019, Treatment of water contaminated by petroleum products through constructed wetlands with integrated plant sediment microbial fuel cells, Journal of Mining and Geological Sciences ISSN 2689-9525
18. Katerina Nikolova, Svetlana Bratkova, Anatoliy Angelov, Petia Genova, Rosen Ivanov, Ani Stefanova, 2020, Treatment of sulphates-rich solutions throught ettringite precipitation with industrial reagents, Sustainable extraction and processing of raw materials journal, 2020, pp 74-78
19. Svetlana Bratkova, Zlatka Alexieva, Anatoliy Angelov, Katerina Nikolova, Petia Genova, Rosen Ivanov, Meria Gerginova, Nadejda Peneva, 2020, Efficiency of microbial fuel cells based on the sulphate-reduction by ethanol, Sustainable extraction and processing of raw materials journal, 2020, pp 21-26
20. Rosen Ivanov, 2021, Seasonal dynamics of plant sediment microbial fuel cell efficiency in a moderate continental climate zone, International Scientific Journal "Industry 4.0", Year VI, issue 1, pp 10-13
21. Katerina Nikolova, Svetlana Bratkova, Petia Genova, Rosen Ivanov, 2021, Use of rhizospheric microflora and/or humic acids for grass vegetation enhancement in reclamation of post-mining areas, Journal of chemical technology and metallurgy, 56, 3, 2021, pp 621-628
22. Rosen Ivanov, 2022, Possibilities for application of sediment microbial fuel cells as biosensors for monitoring of recurrent water pollution with copper, Industry 4.0, 7 (3), 114-117
23. A. Angelov, S. Bratkova, R. Ivanov, P. Velichkova, 2023, Treatment of Acid Mine Drainage in a Bioelectrochemical System, Based on an Anodic Microbial Sulfate Reduction, Journal of Ecological Engineering 24 (7)
24. Rosen Ivanov, Petia Genova, Polina Velichkova, 2023, Influence of environmental factors of long-term operation and effectiveness of SMFC-based biosensors for heavy metal polluted waters, Industry 4.0 8 (5), 182-185
25. A Angelov, S Bratkova, R Ivanov, P Velichkova, 2023, Removal of H_2S and CO_2 from biogas by algae-assisted bioelectrochemical system with oxygenic and anoxygenic photosynthesis, Journal of Chemical Technology and Metallurgy 58 (4), 682-689
26. Rosen Ivanov, Petia Genova, Sediment microbial fuel cell based biosensor for real time detection of Cu2+ in industrial wastewaters – operation and effectiveness, Sustainable Extraction and Processing of Raw Materials Journal, Volume 4, 2023, 43-46, DOI: https://doi.org/10.58903/u17190693
27. Rosen Ivanov, Petia Genova, Polina Velichkova, Sotir Plochev, Application and effectiveness of SMFC-based biosensor for real-time monitoring of water pollution with chromium, zinc and nickel, International Scientific Journal "Industry 4.0", Vol. 8, 2023, Issue 6, 306-308
28. Rosen Ivanov, 2024, Utilisation of green waste from mine overburden through bio-electrochemical systems, SEPRM Vol. 5, 36-39

Appendix 2

PROJECTS

1. Research on chemical, electro-chemical and biological processes in microbial fuel cells at mining waste water treatment
2. Integration of plant sediment microbial fuel cells into constructed wetlands for treatment of wastewaters polluted with petroleum products
3. Investigation of the possibilities of application of risospheric bacteria supporting vegetation and humic acids in biological recultivation of postmined fields
4. Optimization of the biomethanization process by microbial electrolysis cells
5. Biosensors based on sediment microbial fuel cells for monitoring and bioremediation of heavy metal-contaminated waters