LIST OF SCIENTIFIC PUBLICATIONS

Dr. Ivaylo Dimitrov Yotinov

presented for participation in a competition for the academic position of "associate professor" - 4.3. Biological Sciences (Hydrobiology - Water Management), announced in the State Gazette, no. 67, (04.08.2023)

Publications as per item B.4: Habilitation work – scientific papers in referenced and indexed journals by reputable scientific databases (Web of Science and Scopus):

B4.1 Todorova, Y., Lincheva, S., **Yotinov, I.,** & Topalova, Y. (2016). Contamination and ecological risk assessment of long-term polluted sediments with heavy metals in small hydropower cascade. *Water resources management*, 30, 4171-4184. https://doi.org/10.1007/s11269-016-1413-8; **(Web of science: IF=2.848; Q1) (SJR=1.422; Q1) 25 т.**

B4.2 Belouhova, M., **Yotinov, I.**, Schneider, I., Dinova, N., Todorova, Y., Lyubomirova, V., Mihaylova, V., Daskalova, E., Lincheva, S., & Topalova, Y. (2022). Purposely Development of the Adaptive Potential of Activated Sludge from Municipal Wastewater Treatment Plant Focused on the Treatment of Landfill Leachate. *Processes*, *10*(3), 460. https://doi.org/10.3390/pr10030460; **(Web of science: IF=3.5 (2022), Q2 (2022); (SJR=0.529 (2022); Q2 (2022)) 20 т.**

B4.3 Yotinov, I., Belouhova, M., Foteva, A., Dinova, N., Todorova, Y., Schneider, I., ... & Topalova, Y. (2022). Application of Nanodiamonds in Modelled Bioremediation of Phenol Pollution in River Sediments. *Processes*, *10*(3), 602. https://doi.org/10.3390/pr10030602; **(Web of science: IF=3.5 (2022), Q2 (2022); (SJR=0.529 (2022); Q2 (2022)) 20 т.**

B4.4 Yotinov, I. D., Belouhova, M. V., Dinova, N. K., Todorova, Y. T., Schneider, I. D., & Topalova, Y. I. (2022). Adaptation of micro-and metafauna in activated sludge with microbial augmentation to shock loading with amaranth. *Biotechnology & Biotechnological Equipment*, *36*(1), 220-231. https://doi.org/10.1080/13102818.2022.2070437**; (Web of science: IF=1.4 (2022), Q4 (2022)) (SJR=0.317 (2022); Q3 (2022); 15 т.**

B4.5 Yotinov, I., Belouhova, M., Todorova, Y., Schneider I., Topalova Y. (2023) Influence of the azo-dye amaranth on the trophic structure of activated sludge in a model experiment. *Environmental Science and Pollution Research*. https://doi.org/10.1007/s11356-023-27406-2 ; (**Web of science: IF=5.8 (2022), Q1 (2022)) (SJR=0.944 (2022)); Q1 (2022)) 25 т.**

Publications under item Г.7: Scientific papers in referenced and indexed journals by reputable scientific databases (Web of Science and Scopus) apart from the Habilitation work:

Г7.1 **Yotinov, I.,** Lincheva, S., Kenderov, L., Schneider, I., & Topalova, Y. (2013). Evaluation of the self-purification in the waters of the micro-dams in the small hydroelectric power plants (hepps) Lakatnik and Svrazhen: Potential of the bioalgorithms. *Bulgarian Journal of Agricultural Science*, *19*(2), 135-138. **(SJR=0.162; Q3) 15 т.**

Г7.2 **Yotinov, I.,** Todorova, Y., Schneider, I., Daskalova, E., & Topalova, Y. (2017). Comparison of the Influence of Nanodiamonds and Single-Walled Nanotubes on Phenol Biodetoxification by Pseudomonas sp. *Journal of Nanoscience and Nanotechnology*, 17(2), 1031-1040. https://doi.org/10.1166/jnn.2017.12687 ; **(Web of science: IF=1.354; Q3) (SJR=0.326; Q2) 20 т.**

Г7.3 Todorova, Y., Schneider, I., **Yotinov, I.,** Lincheva, S., & Topalova, Y. (2017). Potential of phosphatases for express assessment of self-purification at different types of pollution in running waters. *Water Practice & Technology*, *12*(4), 953-963. https://doi.org/10.2166/wpt.2017.103; **(Web of science: IF=0.17; Q4) (SJR=0.197; Q3) 15 т.**

Г7.4 Topalova, Y., Todorova, Y., Schneider, I., **Yotinov, I.**, & Stefanova, V. (2018). Detoxification potential and rehabilitation of activated sludge after shock loading of Sofia's wastewater treatment plant 'Kubratovo'with mazut. Water Science and Technology, 78(3), 588-601. https://doi.org/10.2166/wst.2018.329; **(Web of science: IF=1.624; Q3) (SJR=0.455; Q2) 20 т.**

Г7.5 Marinova, P., Benova, E., Todorova, Y., Topalova, Y., **Yotinov, I.,** Atanasova, M., & Krcma, F. (2018). Surface-wave-sustained plasma torch for water treatment. In *Journal of Physics: Conference Series* (Vol. 982, No. 1, p. 012009). IOP Publishing. https://doi.org/10.1088/1742-6596/982/1/012009; **(SJR=0.221; без Q) 10 т.**

Г7.6 Todorova, Y., **Yotinov, I.,** Topalova, Y., Benova, E., Marinova, P., Tsonev, I., & Bogdanov, T. (2019). Evaluation of the effect of cold atmospheric plasma on oxygenases' activities for application in water treatment technologies. *Environmental technology*, *40*(28), 3783-3792. https://doi.org/10.1080/09593330.2018.1491631; **(Web of science: IF=2.213, Q3) (SJR=0.485; Q2) 20 т.**

Г7.7 Belouhova, M., Dinova, N., **Yotinov, I.**, Lincheva, S., Schneider, I., & Topalova, Y. (2021). FISH investigation of the bacterial groups anammox and Azoarcus-Thauera at treatment of landfill leachate. *Bulg. Chem. Commun*, *53*, 27. DOI: 10.34049/bcc.53.A.0007; **(SJR=0.168; Q4) 12 т.**

Г7.8 Chobanova, A., Belouhova, M., **Yotinov, I.**, Dinova, N., Daskalova, E., Todorova, Y., Lincheva, S., Schneider, I., & Topalova, Y. (2021). Adaptation of activated sludge to treatment of landfill leachate during model process. *BULGARIAN CHEMICAL COMMUNICATIONS*, 57. DOI: 10.34049/bcc.53.A.0007; **(SJR=0.168; Q4) 12 т.**

Г7.9 Belouhova, M., Daskalova, E., **Yotinov, I.**, Topalova, Y., Velkova, L., Dolashki, A., & Dolashka, P. (2022). Microbial diversity of garden snail

mucus. *MicrobiologyOpen*, *11*(1), e1263. https://doi.org/10.1002/mbo3.1263; (Web of science: **IF=3.4 (2022); Q2 (2022)) (SJR=0.729 (2022); Q2 (2022); 20 т.**

Г7.10 Todorova, Y., Benova, E., Marinova, P., **Yotinov, I.**, Bogdanov, T., & Topalova, Y. (2022). Non-Thermal Atmospheric Plasma for Microbial Decontamination and Removal of Hazardous Chemicals: An Overview in the Circular Economy Context with Data for Test Applications of Microwave Plasma Torch. *Processes*, *10*(3), 554. https://doi.org/10.3390/pr10030554; **(Web of science: IF=3.5 (2022), Q2 (2022); (SJR=0.529 (2022); Q2 (2022)) 20 т.**

Г7.11 Belouhova, M. V., **Yotinov, I. D.,** & Topalova, Y. I. (2023). Nanodiamonds improve amaranth biodegradation in a lab-scale biofilter. *Biotechnology & Biotechnological Equipment*, *37*(1), 317-328. https://doi.org/10.1080/13102818.2023.2191744; **(Web of science: IF=1.4 (2022), Q4 (2022)) (SJR=0.317 (2022); Q3 (2022)) 15 т.**

Г7.12 Dinova N, Peng W., Belouhova M., Lia C., Schneider I., Niea E., **Yotinov I.**, Duana H., Todorova Y., Lü F., Zhang H., Topalova Y., He P., (2023) Functional and molecular approaches for studying and controlling microbial communities in anaerobic digestion of organic waste: A review, *Reviews in Environmental Science and BioTechnology*, *22*, 563–590 (**Web of science: IF=14.4 (2022), Q1 (2022)) (SJR=2.410 (2022)); Q1 (2022)) 25 т.**

Indicator Г.9. Invention, patent or utility model, for which a protective document has been issued in due order

Г9.1 Utility model № 3227 U1 от 19.09.2019. Yana Topalowa, Pavlina Dolashka, Nelly Zheleva, Irina Schneider, Yovana Todorova, Mihaela Belouhova, Ivaylo Yotinov, Elmira Daskalova, Lyudmila Velkova, Mariya Todorova, Nora Dinova.