

CURRICULUM VITAE MOSIICHUK YAROSLAVA BORYSIVNA

date of birth* November 7, 1993 citizenship* Ukraine

Contact information*	37, Vasylkivska str., office 306, Kyiv, Ukraine, 03022 + 38 097 001 63 47 <u>y.mosiichuk@gmail.com</u>
Personal profiles in scientometric databases*	<u>ORCID, Scopus, ResearcherID, ResearchGate, Google</u> <u>Scholar</u>
Education*	Institute of Water Problems and Land Reclamation NAAS of Ukraine, 2016-2020, Specialty: "Construction and Civil Engineering"; Diploma of doctor of Philosophy DR No. 001181.
	Kyiv National University of Construction and Architecture, 2012-2016, Field of study: «Water supply and sewerage», (qualification of Research Engineer in the Construction); Sector Master's diploma with honors M16 No. 037324.
	Technical College National University of Water and Environmental Engineering, 2008-2012, Specialty: "Installation and maintenance of internal sanitary and technical systems and ventilation" (qualification: technician-technologist); Junior Specialist's diploma with honors RV No. 43557155.
Degree*	Doctor of Philosophy, Subject Area "192 – Construction and civil engineering", December 24, 2024, Diploma DR No. 001181.
Professional work experience* (for the last 10 years)	2020 – present from Researcher to Deputy Head of department, Institute of Water Problems and Land Reclamation 2015 – present Engineer, LLC «Unibud Energoservice»

Main research activity

Management of collective research projects (which received funding on a competitive basis from outside the main place of work)

(no more than 5 positions in the last 10 years)

«Proactive Recycling of Sewage Sludge to Improve Marginal Land Quality for Sustainable Biofeedstock Production in Ukraine» on US-Ukraine Alternative Energy Research Competition (Instituted of Water Problem and Land Reclamation NAAS of Ukraine in Collaboration with The Ohio State University, Dnipro State Agrarian and Economic University, National University of Life and Environmental Sciences of Ukraine, Kherson State Agrarian and Economic University); Funded by CRDF Global (U.S.) & MES (Ukraine), 2021-2022.

<u>Information about the implementation of the project</u>
<u>Grant agreement</u>

Participation in collective research projects

(no more than 5 positions in the last 10 years)

- 1. Performer of scientific research work 05.01.01.05 F "To establish patterns of changes in qualitative and quantitative indicators of natural waters due to anthropogenic load on them and to develop a methodology for providing quality water to rural consumers", all-Ukrainian, scientific research program of the National Academy of Agrarian Sciences of Ukraine, 2016-2020, state budget, state registration number 0116U002709.
- 2. Responsible executor of the scientific research work 04.01.00.07 F" To establish the mechanism of changing water quality indicators in the Dnipro River basin due to climate change and develop a methodology for their use in water supply and disposal systems", all-Ukrainian, scientific research program of the National Academy of Agrarian Sciences of Ukraine, 2021-2025, state budget, state registration number 0121U109638.
- 3. PhD, NATO Emerging Security Challenges Division, «Control of Black Sea Safety and Pollution Risks Using Numerical Models» Multi-Year Project Emerging Security Challenges Division Science for Peace and Security Programme, California State University, Tsotne Mirtskhulava Water Management Institute of Georgian Technical University, Georgian Technical University, Institute of Water Problems and Land Reclamation of NAAS, Kardeniz Technical University, NIMRD "Grigore Antipa", Climate, Atmosphere and Water Research Institute at Bulgarian Academy of Sciences CAWRI-BAS, Ecocenter for Environmental Protection (The Organization in Category of Consultative Status with the Economic and Social Council (ECOSOC) of UN); 2023-2026.

Main scientific achievements

Published scientific works*

 Mosiichuk, Y.B., & Khoruzhy, P.D. (2019). Water Purification in Closed Water Supply Systems at Agro-Industrial Complex Enterprises. J. Water Chem.

(no more than 10 positions in the last 10 years)

- Technol, 41, 261–268. https://doi.org/10.3103/S1063455X1904009X (WoS)
- 2. Mosiichuk, Y., & Khoruzhy, V. (2019). RATIONAL CONSTRUCTION AND TECHNOLOGICAL PARAMETERS OF WATER TREATMENT FACILITIES IN RURAL AREAS. Land Reclamation and Water Management, (1), 74-81. https://doi.org/10.31073/mivg201901-167
- 3. Mosiichuk, Y.B. (2020). Mathematical Modeling and Design of Fiber-Packed Bioreactors in Plants for Advanced Treatment of Domestic Wastewater. *J. Water Chem. Technol*, 42, 291–296. https://doi.org/10.3103/S1063455X20040104 (WoS)
- 4. Mosiichuk, Y., Khoruzhyi, P., & Nedahkovskiy, I. (2020). Improving the technology of closed water supply at agro-industrial enterprises. *Land Reclamation and Water Management*, (2), 146 153. https://doi.org/10.31073/mivg202002-253
- 5. Mosiichuk, Y.B., & Khoruzhyi, P.D. (2021). Kilkisni ta yakisni pokaznyky pryrodnykh i stichnykh vod u baseini Dnipra [Quantitative and qualitative indicators of natural and wastewater in the Dnipro basin]. Problemy vodopostachannia, vodovidvedennia ta hidravliky, 36, 39-47. https://doi.org/10.32347/2524-0021.2021.36.39-47
- 6. Mosiichuk, Y.B. (2021). Tekhniko-ekonomichne obgruntuvannia vykorystannia ochyshchenykh stichnykh vod ta osadiv na pidpryiemstvakh ahropromyslovoho kompleksu [Technical and economic substantiation of the use of purified wastewater and sediments at enterprises of the agro-industrial complex]. Visnyk Natsionalnoho universytetu vodnoho hospodarstva ta pryrodokorystuvannia. Seriia «Tekhnichni nauky», 3 (95), 104-116. https://doi.org/10.31713/vt3202110
- Didenko, N., Mosiichuk, Y., Zosymchuk, M., Kharytonov, M., Babenko, M., Mazurenko, B., Lavrenko, S., Rahman, M., & Islam, K. (2021). Recycling Biosolids to Improve Marginal Lands for Bioenergy Feedstock Production in Ukraine. Land Reclamation and Water Management, (2), 79 86. https://doi.org/10.31073/mivg202102-293
- 8. Yatsiuk, M., Mosiichuk, Y., Matselyuk, Y., & Mosiichuk, A. (2023). Analysis of the Hydrochemical Regime of the Dnipro Reservoirs. *Land Reclamation and Water Management*, (1), 66 74. https://doi.org/10.31073/mivg202301-354
- Didenko, N., Mosiichuk, Y., Islam, R., Zosymchuk, M., Mazurenko, B., Lavrenko, S., Kharytonov, M., & Babenko M. (2023). Prospect of Growing Energy Crops on Biosolids-Amended Marginal Soils in Ukraine. Advances in Transdisciplinary Engineering, 38, 875-882. https://doi.org/10.3233/ATDE230371 (Scopus)
- 10. Mosiichuk, Y, & Mosiichuk, A. (2023). Analysis of changes in water indicators intensifying what "BLOOMING" in the

Kaniv Reservoir. 17th International Conference Monitoring of Geological Processes and Ecological Condition of the Environment, Nov 2023, Volume 2023, p. 1-5. European Association of Geoscientists & Engineers. https://doi.org/10.3997/2214-4609.2023520118 (Scopus)

Other significant scientific achievements

(no more than 5 positions in the last 10 years)

- Khoruzhyi P.D., Mosiichuk Ya.B. (2018). Stantsiia dlia biolohichnoho ochyshchennia hospodarsko-pobutovykh stichnykh vod [A station for biological treatment of household wastewater]. Patent of Ukraine. No. 122635. Patent of Ukraine 122635
- 2. Khoruzhyi P.D., Mosiichuk Ya.B. (2019). Zamknena systema vodokorystuvannia na pidpryiemstvakh APK [A closed system of water use at agricultural enterprises]. Patent of Ukraine. No 132615. Patent of Ukraine 132615
- 3. Mosiichuk Ya.B., Khoruzhyi P.D. (2021). Napirna avtomatyzovana ustanovka dlia doochyshchennia hospodarsko-pobutovykh stichnykh vod [Pressure automated installation for further treatment of household wastewater]. Patent of Ukraine. No 147808. Patent of Ukraine 147808

Presentation of scientific results

Key (plenary) reports at nationwide or international conferences (except for conferences that were always held by correspondence)

- "Recycling biosolids to improve marginal lands for biofeedstock production in Ukraine", online, International Conference Growing Energy Crops by Recycling Biosolids on Marginal Lands, Institute of Water Problems and Land Reclamation, Kyiv, Ukraine, September 22, 2022. https://drive.google.com/file/d/1sicDGuntfGpeplZF9jCheo-LoYkraratP/view
- 2. "Analysis of changes in water indicators intensifying what "BLOOMING" in the Kaniv Reservoi", online, 17th International Conference Monitoring of Geological Processes and Ecological Condition of the Environment, Institute of Geology of Taras Shevchenko National University of Kyiv & The European Association of Geoscientists and Engineers, Kyiv, Ukraine, November 7-10, 2023. https://eage.in.ua/?page_id=4496
- 3. "The water security of Ukraine in the conditions of military aggression and global climate change", online, Water for Peace, Vytautas Magnus University Agriculture Academy, Kaunas, Lithuania, March 22, 2024. https://igim.org.ua/2024/03/23/yчасть-y-заході-вода-для-миру-в-академ/

Reports at scientific conferences* (seminars, symposia, etc.)

(no more than 10 positions in the last 10 years)

1. "Scientific approaches in the modernization of agricultural water supply and drainage systems in the conditions of climate change", international scientific and practical conference "Management of water resources in the conditions of climate change", Institute of Water Problems and Reclamation of the National Academy of Agrarian Sciences of Ukraine, Kyiv, March 21, 2017.

- https://drive.google.com/file/d/oB5bWNv4zN8NnczRDY U9nTlpvQoE/view?resourcekey=0-E4euhSc2blQZD6W2T WRzZw
- "Issues of purification and reuse of economic and domestic wastewater", scientific and practical conference with international participation "Water: problems and solutions", National University of Water Management and Nature Management, Rivne, July 5-8, 2017.
- 3. "Analysis of wastewater treatment plants in rural areas and ways to improve them", III International Scientific and Practical Conference of Young Scientists "The Role of Land Reclamation and Water Management in Ensuring the Sustainable Development of Agriculture", Council of Young Scientists of the Institute of Water Problems and Land Reclamation of the National Academy of Agrarian Sciences of Ukraine, Kyiv, December 6, 2017.

 http://rada.iwpim.com.ua/wp-content/uploads/2017/06/sbornik 6 12 2017.pdf
- 4. "The use of natural mechanisms in water purification technologies at the installations of the IVPiM structure of the National Academy of Sciences of Ukraine", international scientific and practical conference "Nature for Water", Institute of Water Problems and Reclamation of the National Academy of Agrarian Sciences of Ukraine, Kyiv, March 22, 2018.

 https://drive.google.com/file/d/1iB8-1JN6jCgDzogXBZF8 2d7fssdFrohm/view
- 5. "Analysis of promising ways of using treated household wastewater and sediments of agro-industrial enterprises", international scientific and practical conference "Water for All", Institute of Water Problems and Land Reclamation of the National Academy of Agrarian Sciences of Ukraine, Kyiv, March 21, 2019.
- 6. "Rational use of natural resources and building materials during the reconstruction of sewage treatment facilities", international scientific and practical conference "Green construction", Kyiv National University of Civil Engineering and Architecture, Kyiv, November 12-13, 2019.
- 7. "Activities of the Council of Young Scientists of the Institute of Water Problems and Reclamation of the National Academy of Sciences of Ukraine", III All-Ukrainian Forum of Councils of Young Scientists, Council of Young Scientists under the Ministry of Education and Science of Ukraine, October 27, 2022.

Scientific and organizational activity

Participation in the organizing committees of scientific events (conferences, seminars,

 Organizer of the international conference "Recycling biosolids to improve marginal lands for biofeedstock production in Ukraine", online, International Conference Growing Energy Crops by Recycling Biosolids on Marginal Lands, Institute of Water Problems and Land Reclamation, symposia, round tables, panel discussions, etc.)

(no more than 5 positions in the last 10 years)

Kyiv, Ukraine, September 22, 2022. https://drive.google.com/file/d/1sicDGuntfGpeplZF9jCheo <u>LoYkrqrgtP/view</u>

- 2. Organizer of the 5th international scientific and practical conference of young scientists "The role of land reclamation and water management in ensuring the sustainable development of agriculture", international, online, Institute of Water Problems and Land Reclamation of the National Academy of Agrarian Sciences of Ukraine, December 8, 2022.
 - http://rada.iwpim.com.ua/2022/12/11/v-conference_2022
- 3. Member of the organizing committee of the "Young Scientist of the Year 2022" competition, Council of Young Scientists under the Ministry of Education and Science of Ukraine, February-May 2023.

 https://leaderscientist.ysc.in.ua/pro-konkurs/

Teaching activity

The main author's educational courses at Higher Education Institutions (developed on the basis of own research)

(no more than 5 positions in the last 10 years)

"Water supply and drainage", III level, Institute of Water Problems and Land Reclamation of the National Academy of Agrarian Sciences of Ukraine, 2023, 90 hours. https://drive.google.com/file/d/1imdWBdtquMpZot13ZlRrmDIozqKwfa8N/view

Honors and awards

Laureate of a prize (awards, honors) of the international or national level, awarded on a competitive basis

(no more than 5 positions in the last 10 years)

Scholarship of the Cabinet of Ministers of Ukraine for young scientists, 2022-2024.

http://www.kdpu-nt.gov.ua/sites/default/files/docs/prezydiya dodatok 2 stypendiyi kmu.pdf

Awards or honors for scientific achievements (from institutions, departments, authorities and local self-government bodies, etc.)

(no more than 5 positions in the last 10 years)

III-degree diploma for a scientific report at the Presidium Awards competition of the National Academy of Agrarian Sciences of Ukraine "For the best scientific report of a young scientist of the NAAS in fundamental and applied research", Presidium of the National Academy of Agrarian Sciences of Ukraine, October 24-25, 2019.

http://www.naas.gov.ua/news/?ELEMENT ID=5467

Improvement of scientific qualification

Additional professional schools (trainings, summer schools, educational seminars, master classes, courses, etc., to acquire relevant scientific knowledge, skills and abilities)

(no more than 5 positions in the last 10 years)

- "Winter School of a Young Scientist 2.0", Council of Young Scientists under the Ministry of Education and Science of Ukraine, Zoom, February 7-13, 2022, 40 hours, certificate No. 1362.
 - https://drive.google.com/file/d/1eHnC5n5Knc9yOSSzUuN Y9nndGbC PiOk/view?usp=sharing
- 2. "Intensive online course Agroengineering", Prometheus, certificate dated April 26, 2022.

 https://courses.prometheus.org.ua:18090/cert/5d16fe115e

 074df4982944e927d31ab6
- 3. "Transformation of science into business: opportunities for commercialization" webinar course of State scientific institution Ukrainian Institute of Scientific and Technical Expertise and Information for professional development, 4.10.-15.11.2022, 19 acad. h., certificate UINTEI-220271. https://drive.google.com/file/d/1DRtiOTvO1h_qLmDhpZGBVjixc5aTskkY/view?usp=sharing
- 4. Grandwriter-III training project, Council of Young
 Scientists under the Ministry of Education and Science of
 Ukraine, Zoom, March 27-31, 2023, 60 hours, certificate
 No. 2509.
 https://drive.google.com/file/d/1B8kOM62fytgZV 5th6ily
 39N9sfOGE9m/view?usp=sharing
- 5. Training courses for scientific and scientific-pedagogical workers at the Institute of Bioenergy Crops and Sugar Beet of the National Academy of Agrarian Sciences on the topic "Bioenergy", Zoom, May 22-26, 2023, 30 hours, certificate No. 48-23.

https://drive.google.com/file/d/1trIBfdaKtfUpuA4z SXjth mi96vzs-L5/view?usp=sharing

Additional information on other important scientific achievements, qualifications, competences, or types of scientific activity that are significant for the implementation of the submitted research/development project

Head of the Council of Young Scientists of the Institute of Water Problems and Reclamation of the National Academy of Agrarian Sciences of Ukraine:

http://rada.iwpim.com.ua/npo-pady/

Foreign languages skills*

(no more than 5 positions in

the last 10 years)

English – B2 (Upper Intermediate)

Grant agreement

