

OPINION

by Assoc. Prof. Emilia Varadinova PhD - IBER-BAS, Sofia and SWU "N. Rilski",
Blagoevgrad, member of a scientific jury in accordance with Order № RD-38-548/19.09.2023
of the Rector of Sofia University „St. Kliment Ohridski”.

Assist. Prof. Ivaylo Yotinov PhD is the only candidate in the competition for acquiring the academic position “Associate Professor”, announced in the State Gazette no. 67 of 04.08.2023, Field of Higher Education 4. Natural Sciences, Mathematics and Informatics, Professional Direction 4.3. Biological Sciences, Hydrobiology – water management, declared for the needs of the Faculty of Biology, Sofia University “St. Kliment Ohridski”.

Professional profile of the candidate

Assist. Prof. Ivaylo Yotinov PhD. graduated from Sofia University "Kl. Ohridski", Sofia in 2012 with a Master's degree in Ecological Biotechnolog Faculty of Biology. At the beginning of his professional career the candidate worked at "Veolia – Sofijska Voda" as a microbiologist. In 2016 he defended his doctoral thesis in specialty "Hydrobiology - biological water treatment". In the same year he was appointed as an assistant, and a year later as assist. prof. in the General and Applied Hydrobiology, Department at the Faculty of Biology of Sofia University. In 2018 he joined the team of the Center of Competence "Clean technologies for sustainable environment - waters, waste, energy for circular economy" as a researcher (hydrobiologist-biotechnologist).

As a head of the Master's Degree Programme "Biobusiness and Bioentrepreneurship" Dr. Yotinov takes an active part in the development of projects aimed at bioentrepreneurship as well as development of innovative ideas in the field of clean technologies and water management. The candidate has participated as an academic mentor in various bioentrepreneurship student trainings. Dr Yotinov won the "Evlogi and Hristo Georgievi" grant for 2010/2011 at Sofia University. He is an award-winner in numerous competitions, including Innovative Youth Project, for best poster. He was also nominated for Pythagora" award 2016 for contribution to the science and Entrepreneurship award for creation and presentation of a comprehensive concept for an innovative biotechnological product with students from the Faculty of Biology. In 2021 he was given the Sofia Municipality award “The best young scientist of Sofia University "St. Kliment Ohridski".

Candidate's research profile description

Ivaylo Yotinov has presented a total of 18 titles - 17 scientific articles, 13 of which were published in journals with an impact factor and one was a registered utility model. Three of those publications can be found in scientific journals included in Q1, 7 are in Q2, 4 in Q3 and 2 in Q4 with a total impact factor of 45.109. The substantial share of scientific articles published in prestigious international journals belonging to the first two quartiles (Q1 and Q2) makes an extremely good impression. Ivaylo's scientific works have been cited in 44 publications in Web of Science and Scopus, and 18 more citations have been registered outside these two databases. The current reference in Scopus and Web of Science has shown that the candidate has an h-index of 5, which at this stage of the development of his professional path is a very good certificate for Dr. Yotinov's scientific output. Dr. Yotinov has registered 76 participations in international and national scientific forums and three participations in trainings at thematic workshops. He has participated in 10 national research and education projects, 12 projects with internal University funding, as well as 10 projects funded by private companies.

Evaluation of contributions

The candidate's contributions are systematized and detailed in three main groups - scientific, applied scientific and methodical. I would like to pay special attention to the applied scientific contributions which are dedicated to maintaining a good ecological status of the water bodies by embedding treatment plants that meet ecological requirements. The mentioned contributions are highly valuable and relevant because they are in line with Bulgaria's strategic goal in water policy, namely optimal water supply in sufficient quantity and quality to fulfill the needs of the population and economy.

Among the methodical contributions, the candidate's leading role in the introduction and refinement of two important indices from an applied point of view - filamentous and biotic index of activated sludge from wastewater treatment plants - stands out. It should be noted here that the candidate participated in constructing an indicator apparatus based on interactions between microorganisms and organisms from the micro- and metafauna, in introducing a method for determining total organic carbon in waters and sediments and in developing a research methodology for microorganisms and organisms from the micro- and metafauna /from

waters, sludge and sediments/ using a Confocal electron laser microscope. In term of education the candidate's contributions are dedicated to the development and introduction of methods for teaching students from bachelor's and master's programs. Together with the team of the Laboratory for "Ecological Biotechnology and Biological Water Purification, Dr. Yotinov has participated" in creating and developing a Business incubator for training students in a dual system and those students are subsequently employed by some business partners.

Academic and pedagogical activities of the candidate

In his CV Dr. Yotinov indicates reading lectures and conducting practical classes in water management, management and marketing in biobusiness, bioremediation, hydrobiology, environmental management, biotechnological methods for environmental protection, biological control and management of water treatment, environmental biotechnology, fundamentals of biodiversity, environmental biotechnology and biological control. Since 2018 until now, Assist.Prof. Dr. Yotinov has been working as a head of the Master's programme in "Biobusiness and bioentrepreneurship" and administrative secretary of the Management Board of the Center of Competence "Clean technologies for sustainable environment - waters, waste, energy for circular economy". Dr. Yotinov was a supervisor of 18 graduate students and reviewer of 22 Master's and Bachelor's theses. The candidate has participated in the organization of annual practical exercises and summer training practices, involving visits to drinking and waste water treatment plants. In this way students are given the opportunity in real production conditions to deal with the modern technological processes of drinking and waste water purification and treatment of sediments, as well as with control and management indicators of water purification processes.

Conclusion

Considering the wide spectrum of candidate's professional competences and skills, I'd like to express my satisfaction with the impressive high-quality scientific production and activity of Assist. Prof. Dr Yotinov.

The scientific production presented by the candidate meets the requirements of the Law on Academic Staff Development in the Republic of Bulgaria, the Regulations on its

implementation and Rules on the Conditions and Procedure for Acquiring Science Degrees and Holding Academic Positions in Sofia University “St. Kliment Ohridski”

In view of the above, I strongly recommend the respected Scientific Jury to propose that the Faculty Council of the Faculty of Biology award Assist. Prof. Dr Ivaylo Yotinov the academic position "Assoc. Prof. " in Field of Higher Education 4. Natural Sciences, Mathematics and Informatics, Professional Direction 4.3. Biological Sciences, Hydrobiology – water management.

Sofia, 15 November 2023

Author of the opinion:

A handwritten signature in black ink, appearing to read 'E. Varadinova', is centered below the text 'Author of the opinion:'. The signature is written in a cursive style.

(Assoc. Prof. Dr Emilia Varadinova)