

## S T A T E M E N T

By Prof. Eliza Petrova Uzunova, Sofia University "St. Kliment Ohridski", Faculty of Biology, Department of "General and Applied Hydrobiology"

**Subject:** order RD - 38 - 548 / 19.09.2023 of Prof. Anastas Gerdzhikov for the selection of DOCTOR in the scientific specialty "Hydrobiology-water management" announced in professional direction 4.3. Biological Sciences, for the needs of the "General and Applied Hydrobiology" Department, Faculty of Biology of the "St. Kliment Ohridski".

**Competition documentation.** For participation in the professional competition announced in SG No. 67 of 04.08.2023 4.3. Biological Sciences, for the needs of the "General and Applied Hydrobiology" Department, Faculty of Biology of the "St. Kliment Ohridski" documents were submitted by a single candidate: chief assistant Dr. Ivaylo Yotinov. The materials presented by the applicant meet the requirements according to the RAS and, accordingly, the RAS. The technical documentation is designed and arranged in accordance with the inventory in the Application for participation in the competition.

**Education and career development.** Dr. Ivaylo Yotinov acquired a master's degree in biology at the Faculty of Biology of Sofia University "St. Kliment Ohridski" in 2010. The educational and scientific degree "doctor" was acquired by the candidate in 2016. His dissertation work was developed in the field of Hydrobiology - biological water treatment. Since 2016, Ivaylo Yotinov has been an assistant in the Department of "General and Applied Hydrobiology" of the SU, and since 2017 – main assistant. He has experience as a microbiologist in wastewater and drinking water treatment plants.

**Courses, specializations and awards.** Dr. Yotinov is a participant in three training courses. He won a prize in a number of competitions, two awards for the best poster at conferences, as well as the winner of the award of the Sofia Municipality for the best young scientist of Sofia University "St. Kliment Ohridski" for 2021.

**Publications and other data.** The total number of articles that make up Dr. Yotinov's scientific output is twenty-eight (28). The candidate participates in the competition with seventeen (17) articles in scientific journals, which are referenced and indexed in databases of scientific information (Web of Science and Scopus). The candidate's publications are co-authored with a broad team of researchers (more than 5 co-authors). This is an indication of Dr. Ivaylo Yotinov's ability to collaborate with specialists in his research field and to be a productive member of a scientific team. In five (5) of the publications, the candidate is the lead author.

The distribution of articles in indicator B by journals with quartiles is as follows: with Q1 – 2 articles, with Q2 – 2 articles, with Q3 – 1 article. In indicator D, the distribution by quartiles is: with Q1 - 1 article, with Q2 - there are 5 articles, with Q3 - 3 articles, with Q4 - 2 articles and one article (report from a scientific conference) does not have a defined quartile, only SJR.

The candidate submits 44 citations of scientific works with his participation, the number of which satisfies the requirements set in ZRAS and, respectively, PPZRAS of SU.

The fulfillment of the minimum national requirements in terms of indicators for holding the position of Associate Professor is as follows:

The indicator from group "A" is covered by 50 items; According to the group "B" indicator, no points are required for this position; Group "B" indicators are covered by 105 points (out of 100 required); Group "D" indicators are covered by 229 points (out of 200 required); Group "D" indicators are covered by 88 points (with 50 required);

Total points by group of indicators A+B+D+D is equal to 472 points (out of 400 required), which meets the requirements of the RASRB.

**Scientific and applied contributions.** I accept the author's reference presented by Dr. I. Yotinov for the contributions of his scientific publications, which are grouped into those of a scientific and scientific-applied nature and those of a methodological nature. Although there are many deviations in the text unrelated to the specific purpose of this part of the documentation, and in some parts, it is difficult to distinguish contributions of an original nature from those of a confirmatory nature, the candidate has managed to describe in detail the research carried out with his participation.

In general, Dr. Yotinov's research activity is concentrated in one of the segments of water resource management, namely biological water treatment. The main place in the candidate's contributions is occupied by the results of a study of various parameters of the microbial fauna of the activated sludge in water treatment plants, their quantitative composition, the biodiversity of the micro- and metafauna in these sludges. In the field of the candidate's scientific research, an important place is occupied by those related to the discovery of mechanisms for controlling the water purification process, and for this purpose a wide range of indicators - hydrobiological, microbiological, biochemical, molecular genetic - are used. The studies were conducted both in model, laboratory conditions and in natural conditions.

The wide range of research directions, as well as the multitude of methods, often from the arsenal of different scientific fields, which were used in these studies contributed to the construction of Dr. Yotinov as a specialist with a global view of the problems in the field of biological water treatment.

**Project and teaching activity.** Although participation in projects is not a mandatory element of the evaluation for the position of "associate professor" according to ZRAS, it should be noted the large number of participations of the candidate in research project teams - over 20 national and institutional ones, in one of which he is the manager.

The candidate has, although relatively short, but quite intensive teaching experience in delivering the lecture and practical parts of university courses of different content and level of study, such as "Water Management", "Bioremediation", "Key Directions in Bio-management", and many others. The candidate also has considerable experience as supervisor of Master's theses – more than 20.

My personal impressions of the candidate are for a sustainable manifestation of high responsibility towards the assumed official commitments, initiative in relation to current tasks of an administrative and educational nature, personal commitment in the process of student education.

## **CONCLUSION**

After a review of the scientific works presented in the competition and data on the entire professional career of the candidate, an analysis of the scientific and scientific-applied contributions, their reflection in the scientific literature, their significance for the development of hydrobiology in our country, it is established that Dr. Ivaylo Yotinov meets all the requirements laid down in the Law on Promoting the Academics in the Republic of Bulgaria and the Rules for its implementation, as well as the requirements laid down in the Regulations for the terms and conditions for acquiring scientific degrees and for holding academic positions at Department of General and Applied Hydrobiology. This gives me the reason to give my positive opinion and recommend to the members of the esteemed Scientific Jury to support the election of Dr. Ivaylo Yotinov for the academic position "Associate Professor" in the scientific specialty "Hydrobiology- water management" in professional direction 4.3. Biological Sciences.

Sofia, 05.10.2023

Prof. Eliza Uzunova