

STANDPOINT

From Assoc. Prof. Galina Satchanska, PhD

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Member of the Scientific Evaluation Committee

(Rector's Order SU №RD-338-548/19.09.2023)

According: Contest for acquisition of the academic position "Assoc. Prof." in the field 4.3 Biological Sciences (Hydrobiology - Water management) necessary for the academic staff of Department Hydrobiology, Faculty of Biology, Sofia University "St. Kl. Ohridski".

One candidate participated in the announced contest for a position Associate Professor in Hydrobiology - Water Management - the current Asst. Prof. Ivaylo Yotinov, Ph.D. The candidate's documents are correctly prepared and submitted according to the requirements of the ZRASB and the Regulations for Scientific Degrees and Titles of SU "St. Kl. Ohridski". The candidate holds a bachelor degree in Biology and a master degree in Environmental Biotechnology obtained at Sofia University "St. Kl. Ohridski". Later, he defended his doctoral degree, also at the University of Sofia on the topic "Strategies for biomanagement of self-purification in sediments at a cascade of MVPPs "Sreden Iskar". Dr. Yotinov is an assistant professor at the Department of Hydrobiology, Faculty of Biology, SU, where he successfully conducts lectures and practical exercises.

The candidate applies with 17 scientific papers, and additionally with 2 papers joined to his PhD degree. Articles not participating the contest (not referenced and indexed in Scopus and Web of Science, but showing additional research activity) are also described in the documents. The candidate has participated in SU, national and international projects (32 in total), including in the Clean & Circle Competence Center and is the scientific supervisor of 18 graduates. He has participated in 76 scientific conferences.

1. Teaching at UNI

The teaching activity of Assist. Prof. Yotinov includes both lectures and practicals in volume (500-800 hours per year) exceeding the required one. Mr. Yotinov has taught lectures on Water Management, Total Quality Management, Key Directions in Bio-business, Management and Marketing in Bio-business to students from bachelor and master programs. He also conducted practical classes and supervised 18 diploma theses. The large number of graduates shows the candidate's dynamic work with students.

2. Research

Submitted for analysis documents show that the candidate's scientific results and scientometric indicators are the result of his work on numerous national and international projects. 5 scientific publications are submitted as Habilitation work (Group B indicators) (100 points required by ZRASB/105 points delivered by the candidate) and Scientific articles and monographs (Group D indicators (200 points required by ZRASB/204 points submitted by the candidate). The articles are in the field of the announced contest. From the analysis I have done one can see that all the listed articles were found out in the relevant journals, and their “Q” corresponds to those specified by the candidate for the corresponding year, checked in the Scimago Journal & Country Rank database. The candidate's citations in Scopus are 75, exceeding the required minimum for an associate professor of 25, each carrying 2 points according to the ZRASB. The H-index of I.Y. in Scopus is 5, which is enough for Docent contest.

Yotinov's participation with oral talks and posters at international and national scientific forums counts 76. I would like to draw attention to the fact that some of the projects/contracts listed in the documents suffer from lack of numbers, but using their title the necessary info can be find.

3. Scientific achievements

Scientific achievements of the candidate cover 4 different areas, with fundamental and applied outcomes comprehensively described and supported by enclosed materials (projects, articles and congresses participation):

I. Indicators for control and management of purification processes in water basins in Wastewater Treatment Plants

The candidate was working jointly on some projects with the Sofia Wastewater Treatment Plant “Kubratovo”. In this area, research on the interactions of micro- and metafauna with bacteria in activated sludge was conducted.

II. Oxygenase enzymological activities in the degradation of pollutants such as petroleum products in activated sludge (catechol-1,2-dioxygenase, catechol-2,3-dioxygenase, etc. enzyme activities)

In this part, the candidate established the bio-detoxification and biodegradation capabilities of microorganisms in activated sludge.

III. The biological management of river ecosystems with hydropower - Iskar gorge

Several hydroelectric power stations along the Iskar River lead to considerable changes in river flow, caused water stasis and flowering and played bad impact on the naturally existing ecosystems. The negative effect of the hydroelectric power plants in the Iskar gorge is visible. The candidate worked on water quality change and eco-potency of sediments in Iskar River at the same time solving environmental problems there.

IV. Biodegradation of aromatic xenobiotics amaranth and phenol

Xenobiotics containing one or more aromatic nuclei pose a particular environmental hazard due to the difficulty of ring opening and hydrolysis. The candidate's research in this field on the microbial activity aimed the development of biotechnological methods for pollutants clean-up.

Recommendations to the candidate: At some places in the articles' description, the scientific journal B&BE is described as a Q4 Journal, but it is actually a Q3 Journal. Nevertheless, the higher points (for Q3 - 15) are correctly marked, resp. the final points sum - correctly calculated. I consider this inaccuracy as a typewriting one.

Conclusion: Based on the analysis performed, I found that the candidate Asst. Prof. Ivaylo Yotinov, PhD, meets all the requirements of the RASRB and the requirements of the SU for holding the academic position "Associate Professor".

I strongly recommend to the respected Scientific Evaluation Committee as well as to the respected Biological Faculty Council at the Sofia University to award Dr. Ivaylo Yotinov the academic position "Assoc. Prof" in Biological Sciences (Hydrobiology-Water Management).



Reviewer:

/Assoc. Prof. Galina Satchanka, PhD/

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