

STATEMENT
by Professor, Stoyan Angelov Shishkov, PhD
Sofia University "St. Kliment Ohridski", Faculty of biology
of the announced competition for the occupation of the academic position of "Associate
professor" in the professional field 4.3. Biological Sciences
(Microbiology - Microbial pathogenesis)

In the competition for "Associate professor", announced in the State Gazette, issue 92/18.11.2022 and on the website of Plovdiv University "Paisii Hilendarski", for the needs of the Department of Biochemistry and Microbiology, Faculty of Biology, as a candidate participates only associate professor, Dr. Mariana Marhova-Kostova from Plovdiv University "Paisii Hilendarski"

1. General presentation of the procedure and the candidate.

Only assistant professor, Dr. Mariana Marhova-Kostova, Faculty of Biology, „Paisii Hilendarski“ University of Plovdiv, submitted documents for participation in the competition. The set of documents submitted by the applicant on paper and electronic media is in accordance with the ones indicated in art. 77 (1) of the Regulations for development of the academic staff of the University of Plovdiv and includes: a set of administrative documents; lists of scientific papers and citations; research documents; reference for compliance with the minimum national requirements and the additional faculty requirements; habilitation report and self-assessment of the contributions. Also included are documents for the academic work and documents according to the additional requirements of the faculty; declaration of originality and authenticity of the attached documents. Attached is a list of the scientific papers with which he participated in the competition and evidence of the observed citations.

Assist.Professor Marhova has attached a list of 42 scientific papers: 1 monograph, 39 scientific publications, 1 textbook and 1 microbiology guide published by an academic publishing house. A list of research projects - 8 issues.

Scientific papers that are not related to the dissertation and and participate in the competition - 35 in number. Their distribution is as follows: monograph “Drug resistance and virulence in Enterobacterales uropathogens. Research in the period 1997 – 2021”, 15 scientific publications in journals with impact factor or impact rank, 15 publications in refereed journals without impact factor or impact rank, 5 publications in conference proceedings.

Assist. Professor Marhova-Koseva graduated in 1985 at Plovdiv University "Paisii Hilendarski" - specialty Biology, Biology teacher with a second specialty in Chemistry. He

successfully defended his thesis in 1990 at the Institute of Biochemistry and Physiology of Microorganisms, USSR.

Her academic career began in 1991 as a part-time assistant in the Department of Biochemistry and Microbiology at the Faculty of Biology. Since 1997 she has been an assistant professor in this department. The scientific activity of assistant professor Marhova is in the field of medical and environmental microbiology.

2. General characteristics of the candidate's activity.

The teaching activity of assistant Prof. Marhova includes the lectures and exercises in five biological disciplines at the Bachelor's degree, in various specialties and in "Master" degree teaches 8 disciplines. Her classroom employment is impressive. For the last year she has delivered 280 hours of lectures and 346 hours of middle-respiratory exercises.

The candidate is the author of a large number of curricula. Four compulsory and 4 elective microbiological disciplines for bachelors, 4 compulsory disciplines and 1 elective discipline for masters are covered.

Assistant professor Marhova was the research supervisor of one successfully defended doctoral dissertation, as well as 15 graduates in the Bachelor's degree and 8 in the Master's degree.

The educational and pedagogical activities of the candidate show the ability to successfully combine teaching and research work.

The scientific works, provided by assistant Prof. Marhova, can be systematized according to the scientific directions of her research work. The monograph covers own original research on bacteria of the genus *Enterobacteriales* causing diseases of the urinary tract. The results of research on the virulence, resistance and impact of these bacteria are reflected in 17 publications (work 2.1. - 2.5.; 3.1., 3.2., 3.5., 3.7, 3.8, 3.11, 3.13. - 3.15.; 4.1., 4.2 . and 4.5.). They outline the candidate's undoubted scientific contributions.

The other publications reflect the scientific and applied contributions of Assistant Prof. Marhova in the field of microbial ecology. A thorough analysis of the microbiological status of waters, wetlands and urban terrains has been carried out.

Twenty-eight scientific papers have been published in English, and the rest - in Bulgarian. 15 articles have been published in impact factor / rank journals. The total IF is 7.605 and the total SJR -1.669. Two publications are in magazines with Q₂, 5 - Q₃ and 8 - Q₄. 15 of the articles have been published in Bulgarian scientific journals, and 5 - in collections of national scientific forums. the candidate is the first author in 8 of the publications.

For participation in the competition, assist. professor Marhova provided a list of 8 projects with her participation. She was a participant in an international project, 3 projects funded by the NSF, and 4 projects funded by the NSF of the University of Plovdiv. Her project work is related to her research areas.

The provision of the educational process in the Bachelor's and Master's degrees with textbooks and teaching aids is a contribution to the development of academic education (work 5.1., 5.2.).

The citations of the publications of assist.professor Marhova in Web of Science and Scopus are 66. 12 publications are cited.

Analyzing the research activity of assist.professor Marhova, I am convinced that the presented scientific papers have scientific and scientific-applied significance, including for university education. Her works are recognizable by the international scientific community.

I believe that the candidate meets the minimum national requirements for the academic position of "assistant professor", according to LDASRB:

Group of indicators	Contents	Academic requirements position of "professor"	<i>implementation by the candidate</i>
A	Indicator 1	50	50
B	Indicator 2	0	0
C	Indicator 3 or 4	100	100
D	Sum of indicators from 5 to 10	200	211
E	Sum of points in indicator 11	50	128
F	Sum of indicators from 12 to the end	0	125
Total		400	613

The candidate also meets the additional requirements of the Faculty of Biology for holding the academic position of "associate professor", accepted by the FS, (protocols No. 246/12.07.2019 and No. 279/29.09.2022).

Scientific publications submitted for review are the result of extensive collective work. The personal contribution of assist. Prof. Merhova stands out clearly in these posts.

3. Critical remarks and recommendations.

Two of the citations of the article published in the Central European Journal of Biology are self-citations. Regardless of this fact, the number of points from the remaining quotations satisfies the requirement for indicator group E.

CONCLUSION

The scientific papers and materials submitted by assist.professor Marhova for participation in the competition for the academic position of "associate professor" meet all the requirements of

the Law for the Development of Academic Staff in the Republic of Bulgaria, Regulations for development of the academic staff of Paisii Hilendarski University of Plovdiv.

The candidate has submitted a sufficient number of scientific papers for participation in the competition. They contain original scientific, scientific-applied contributions and have been recognized by the international scientific community. The research and teaching activity of assist. Pr. Marhova is at a high level and cannot be questioned.

I give a positive assessment and recommend to the members of the Faculty Council of the Faculty of Biology to vote positively for the election of assist. Prof. Mariana Ivanova Marhova-Kostova to the academic position "Associate Professor" at the University of Plovdiv "Paisii Hilendarski" in higher education: 4.Natural Sciences, Mathematics and informatics, professional field 4.3. Biological sciences (Microbiology - Microbial pathogenesis).

0.304.2023

Prepared the opinion:

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