

## OPINION

Prepared by prof. Lyudmila Vladimirova Kabaivanova - Milanova, PhD, Institute of Microbiology "Stephan Angeloff" - BAS, elected as a member of the Scientific Jury, on the basis of order No. I-57/23.04.2024 of the Director of the Institute of Microbiology "Stephan Angeloff" - BAS, according to the decision of the National Assembly of the same institute, on the materials submitted for participation in a competition for the academic position "Associate Professor" in the field of higher education 7. Health care and sports, professional direction 7.1 Medicine, announced in SG №. 28 of 04/02/2024 for the needs of the Biotechnology Department, Metabolomics Laboratory.

Candidate: assist. prof., PhD Lilia Vladimirova Mihailova

### **Common part**

In the competition for the academic position "associate professor" in professional direction 7.1 Medicine, the only candidate is Liliya Vladimirova Mihailova, assistant professor, Ph.D. The review of the documents shows that the procedure for disclosure and announcement of the competition has been followed. The presented set of materials has also been prepared in accordance with the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria (LDASRB) and the Regulations for its application, as well as the regulations for the terms and conditions for acquiring scientific degrees and holding academic positions at the BAS.

### **Brief biographical data**

L. Mihailova obtained a Master's degree in Pharmacy at the Faculty of Pharmacy of the Medical University of Plovdiv, Plovdiv, Bulgaria, and later became a Doctor of Pharmacology (including pharmacokinetics and chemotherapy) in the field of higher education 7. Health care and sports, professional direction 7.1. Medicine, in the same university.

Her career development continues with winning a competition for "assist. prof." at the "Stefan Angelov" Institute of Microbiology - BAS (2021), where she is currently working.

## **General presentation of scientific works and scientific activity**

Dr. Mihailova participated in the competition with **37 publications** (after "PhD"), in 13 of them she was the 1-st or corresponding author. The number of citations to date - **435**, as well as the cumulative impact factor of her publications - **130.96** are impressive. According to the presented report on the fulfillment of the minimum requirements for the academic position "Associate Professor" (National Criteria under LDASRB for the relevant professional field), it can be seen that the candidate not only meets, but also repeatedly exceeds all requirements. She presented materials corresponding to **7130.43** points out of the required **400**. In the groups of indicators, respectively: **A – 50 points; C – 134.17 points; D – 264.36; E – 6525 points; E – 156.90 points.**

The scientific activity of assist. prof. Mihailova is closely related to the topic developed by the unit in which she works - Metabolomics laboratory at the Department of Biotechnology, and it is extremely topical, concerning the problems of protecting human health. Her scientific interests are in the field of molecular pharmacology, pharmaceutical biotechnology and biological activity of natural products with a focus on the study of socially significant diseases and the use of modern approaches for their prevention and pharmacotherapy. She has presented the results of her research with **30 appearances** at international scientific forums.

The project activity of Dr. Mihailova is also high. She participated in 8 national and international projects. She is the coordinator for IMSA-BAS of the PlantaSYST project.

In 2020 her work was given an award by the Bulgarian Phytochemical Association, and in 2023 Dr. Lilia V. Mihailova is among the three nominees for the "Pythagoras" award for the best young scientist in the field of Life Sciences and Medicine. At the beginning of this year, she received the Annual Award for High Scientific Achievements of the IMSA, which distinguishes the work of the team of the Metabolomics Laboratory.

## **Scientific contributions**

The main contributions from the research activity of assist. prof. Mihailova can be considered in the aspect of unraveling the mechanisms of action of natural substances of plant origin and hybrid combinations with established medicinal products with a focus on solving the problem of obesity, skin aging and other socially significant diseases. The studies and the inclusion in the conducted experimental work of a combinatorial approach aimed at identifying

plant secondary metabolites with activity against obesity and premature aging, as well as determining their molecular mechanism of action, confirm the importance of this scientific topic. This thematic area holds future potential for practical application in the struggle to address the unfavorable prognosis for the development of the global obesity problem, as well as to improve the quality and length of people's lives.

## **CONCLUSION:**

The obtained results, reflected in the presented publications, are original, up-to-date and of public importance. They reveal opportunities and perspectives for new research on current problems affecting human health and life. From everything that has been said so far, it can be seen that we recognize an established specialist enjoying authority in scientific circles.

The documents and materials presented by assist. prof. L. Mihailova meet all the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria, the Rules for its Application and the Rules for the Development of the Academic Staff of BAS and IMSA for the acquisition of the academic position "associate professor". This gives me the reason to express my convinced positive opinion regarding the submitted candidacy for the academic position of "associate professor".

As a member of the Scientific Jury for the announced competition, I give a positive assessment and recommend to the members of the esteemed National Assembly of IMSA - BAS, to elect assistant professor Dr. Lilia Vladimirova Mihailova to the academic position of "associate professor" in the field of higher education 7. Health care and sport, professional direction 7.1 Medicine.

17.06.2024 г.

**На основание  
чл. 2 от ЗЗЛД**

/prof. Lyudmila Kabaivanova, PhD/