

REVIEW

from

prof. Maya Boyanova Georgieva, PhD, Faculty of Pharmacy, MU – Sofia, designated as a member of a scientific jury on the basis of Art. 4, paras 1 and 2, ZRASRB, Decision of the Faculty Council of the Faculty of "Pharmacy" at the MU - Varna and order of the Rector no. P-109-92/21.03.2024

Regarding: competition for filling the academic position "PROFESSOR" in the field of higher education 7. "Health and sport", by professional direction 7.3. "Pharmacy" and scientific specialty "Pharmaceutical Chemistry" in the Department of "Pharmaceutical Chemistry" of the Faculty of Pharmacy of the MU - Varna, announced in the "State Gazette", no. 7/23.01.2024.

Only one candidate submitted documents for participation in the competition - Associated Professor Svetlana Fotkova Georgieva, PhD. from the "Pharmaceutical Chemistry" department of the Faculty of Pharmacy of MU-Varna, for the needs of which the competition is announced.

The review of the materials presented in the current procedure was carried out according to Protocol No. 1/03.04.2024 of the first meeting of the Scientific Jury (SJ), appointed by order No. № P-109-92/21.03.2024 of the Rector of the MU "Professor Dr. Paraskev Stoyanov" - Varna, with whom I have been appointed to prepare this review as an external member of the Scientific Jury.

The review of the documents shows that the procedure for disclosure and announcement of the competition was followed, and the documents were prepared in accordance with the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria (ZRASRB), the Regulations for its application and the internal regulations of the Medical University - Varna.

I believe that the candidate has submitted all the necessary documents for participation in the competition for the academic position "Professor" under Art. 138 (1) of PRASMU in MU-Varna, which are truthfully and in detail formed and accompanied by the relevant declaration of authenticity.

I declare no conflict of interest with the candidate.

I have no remarks or comments on the presented documents.

The evaluation of the candidate is complex and includes her teaching and research activities, according to Art. 137 (1) of PRASMU.

Brief biographical data about the candidate

Assoc.prof. S. Georgieva was born on 17.04.1981 in the city of Burgas. In 2003, she graduated from the University "prof. Dr. Asen Zlatarov" - Burgas, and in 2006 she obtained a master's degree in "Biotechnology" at the same University. During the period from 2008 to 2011, she was a part-time doctoral student at the Department of Biotechnology at the University "prof. Dr. Asen Zlatarov" city of Burgas. In 2011, she defended a dissertation on the topic: "Biotransformation of compounds with estrogenic activity using laccase immobilized on a

polymer membrane in a non-isothermal bioreactor" and obtained a PhD in "Pharmaceutical Chemistry" from a regulated profession in the professional field of "Pharmacy". Since 2022, she is a master pharmacist, graduating with a specialty "Pharmacy" at the Medical University - Varna, Faculty of Pharmacy. Assoc.prof. S. Georgieva has a specialty in "Analysis of Medicinal Products".

Associated Professor Georgieva's professional development began in 2003, when she was initially appointed to the position of chemical maintenance associate at the company "Nola 7" OOD, Sofia, where she worked until 2007. In 2008, the candidate's academic development began with the appointment of AD assistant professor at the University "Prof. Dr. Asen Zlatarov"-Burgas, Medical College, Department of Pharmacy. In the period 2012 - 2013, Assoc. Prof. Georgieva was an Assistant Professor at the University of Varna, Faculty of Pharmacy, Department of Pharmaceutical Sciences at the Medical University "Prof. Dr. Paraskev Stoyanov" Varna, and during the period 2014 - 2018 she was the Head of the Department of "Pharmaceutical Sciences and Pharmaceutical Management", Faculty of Pharmacy, at the Medical University "Prof. Dr. Paraskev Stoyanov" Varna. In the period from 2018 to 2022, she held the position of Head of the Department of Pharmaceutical Chemistry, Faculty of Pharmacy at the Medical University "Prof. Dr. Paraskev Stoyanov" Varna, and in 2013 she won a competition for the position of associated professor in the same department. Since January 2023, she has been working as a master pharmacist successively in the pharmacy "Sofarmasi - Dubrovnik", the city of Varna, at the company Sopharmasi 9 /EOOD/, Sofia, and in the pharmacy "Framar No. 49", the city of Varna, at the company "Alba D" Ltd., Stara Zagora.

Assoc.prof. S. Georgieva speaks English and Russian.

Evaluation of the candidate's activity

1. Educational and pedagogical activity

From the attached academic reference for the study load with ex. No. 112-31/29.01.2024, it is clear that with a standard of 720 hours (180 hours per year) according to the decision of the AC of MU - Varna, the total annual classroom employment of Associated Professor Georgieva in the last four academic years is 900 hours, including lectures and exercises. This is a reliable foundation for quality subsequent educational and teaching realization through the acquisition of the academic position "Professor". The higher classroom workload of the candidate does not have a negative impact on the enthusiasm and competence with which she carries out the assigned and teaching activities.

It is evident from the presented Certificate No. 109-87/29.01.2024 that Assoc. Prof. Georgieva supervised 4 successfully defended doctoral students and is currently the supervisor of 5 doctoral students in full-time study.

After her habilitation as an associated professor, she co-authored 5 textbooks with a total volume of 450 pages, including a collection of "*Pharmaceutical Chemistry Test Problems for Pharmacy Students*" Part I and II, a "*Practice Guide for pharmaceutical chemistry*" and "*Manual for practical exercises in pharmaceutical analysis*" part I and II, for master pharmacists issued in the period 2018 - 2020, respectively.

2. Scientific and research activity

The scientific research activity of associated professor Svetlana Georgieva is evaluated in accordance with the minimum and additional scientometric requirements specified in Appendices 1 and 2 of PRASMU - Varna.

In the competition for "Professor" according to the submitted academic reference with Ex. No. 16/26.01.2024 Assoc.prof. Svetlana Georgieva, PhD participated in a total of 75 scientific works, of which 14 were beyond the minimum scientometric requirements for AD "Professor", 26 presented when occupying AD "Associated Professor" and 2 for acquisition of ONS "doctor". The review of the works shows that 8 of them were published in specialized scientific publications with IF (with a total IF of 18,036), 6 of which outside the procedure for acquiring the ONS "doctor" and holding the AD "associated professor". 27 of the submitted publications are in non-refereed peer-reviewed journals or published in edited collective volumes.

Assoc. Prof. Georgieva is also a co-author of a monograph ("*Systematic review of the properties and action of nutritional supplements. Safety and quality*") published in Bulgarian in 2023. In accordance with PRASMU, Assoc. prof. Georgieva also provided the necessary separation protocol from which it is clear that the submitted work meets the requirements for a monograph and can be reviewed for participation in the current competition.

According to the attached citation report, the candidate's works have been cited a total of 8 times, all in journals indexed and referenced in the world-famous databases Web of Science and/or Scopus. She has 87 participations in various scientific forums, of which 11 are abroad.

I accept all the works of Assoc.prof. Georgieva as related to the profile of the competition, but only those that are outside her doctoral dissertation and her habilitation as an associate professor will be reviewed. The abstracts of the presentations are also not subject to review, but they will be taken into account when forming my final evaluation. In my review, I will refer to the works of the candidate with their original numbering, as indicated in the presented list of publications.

Assoc. Prof. Georgieva's scientific works are directed in the following main directions:

- ✓ Synthesis and characterization of nitroimidazole and bexarotene analogues;
- ✓ Application of *in vivo* and *in vitro* models to determine the toxicological, pharmacological and antimicrobial profile of biologically active substances;
- ✓ Biologically active substances in natural products;
- ✓ Safety and quality of food, nutritional supplements and natural products;

Although all the works are in the field of pharmaceutical chemistry, in terms of subject they can be classified into the following groups: a) *synthesis and characterization of nitroimidazole derivatives* (G8-6 and G8-26); b) *synthesis and characterization of bexarotene*

derivatives (G8-18, Supplement 7, Supplement 11 and Supplement 6); c) *drug design of retinoids* (G8-3); d) *liver in vivo metabolism simulator in rats* (G7-3, G8-15, G8-19, Supplement 9, Supplement 10, Supplement 13 and G7-6); e) *skin metabolism simulator* (G7-4, G7-5, G8-17, G8-20, G8-21, G8-24, G8-27); f) *determination of oral activity* (G8-22); g) *prediction of antimicrobial activity* (G8-25); h) *investigation of the antimicrobial activity potential of newly synthesized compounds* (G7-1, G7-2, Supplementary 8).

Part of the publications presented by the candidate are aimed at the socially significant topic of food safety and quality, nutritional supplements and natural products (D8-1, D8-2, Additional 5).

Assoc. Prof. Georgieva has directed her attention in the direction of following trends for modern therapy of socially significant diseases, such as: a) *oncology* (G8-4, G8-14); b) *acne* (G8-7, G8-11, Supplement 2 and Supplement 3); c) *bacterial and fungal infections* (G8-8, G8-10, G8-13, G8-23, Supplement 1 and Supplement 4, Supplement 12); d) *Based disease and multiple sclerosis* (G8-9, G8-12, G8-16) and e) *others* (G8-5).

In my review, I would also like to dwell briefly on the monographic work of Assoc. Prof. Svetlana Georgieva "*Systematic review of the properties and action of nutritional supplements. Safety and Quality*". In it, the authors report the modern trend towards promoting the use of nutritional supplements, which is directly related to the general opinion and assumption about their safety and ability to provide the body with the necessary substances for the optimal functioning of all physiological processes. Exactly this, according to the authors, leads to a serious increase in the production and trade of nutritional supplements worldwide. In this sense, the subject of the presented monograph concerns an important and critical area of great importance for public health and is focused on the rationality and application of nutritional supplements as products with an effect on human health.

In this sense, the monograph of S. Georgieva and N. Agova enriches the public with up-to-date knowledge on the problems of the properties and action of nutritional supplements, the regulations related to their distribution and use, as well as the safety and quality of commercial products. The presented work is of interest not only to narrow specialists in the field of nutrition and dietetics, but also to a wide range of readers with an interest in the fields of medicine, pharmacy, dietetics, as well as to educated patients interested in healthy nutrition and lifestyle.

The provided academic reference certifies that the candidate participated in a total of 8 scientific research projects, of which 1 was international. Assoc.Prof. Svetlana Georgieva was the head of 6 of the presented projects, all financed by the "Science" fund of MU-Varna. The candidate is also a participant in two projects, 1 financed by the "Science" fund of MU-Varna and 1 under the Competition "Research and artistic activity - 2019" of the University "prof. Dr. Asen Zlatarov" Burgas.

The values of the main groups of indicators are presented in the table:

A group of metrics	PRASMU of MU-Varna	Assoc. Prof. Svetlana Georgieva
A	50	50
B	100	100
Г	200	307.8
Д	100	120
E	100	380
Maximum total points	550	957.8

The scientometric indicators of Associated Professor S. Georgieva significantly exceed the minimum scientometric requirements of Medical University of Varna laid down in Appendix 1 of PRASMU in MU-Varna for the occupation of the academic position "professor" in professional direction 7.3. "Pharmacy" - with a maximum number of points of **550**, Associated Professor S. Georgieva has **957.8**.

Conclusion

Associated Professor Svetlana Fotkova Georgieva, PhD is a researcher and teacher with high authority and undoubted personal qualities. Her scientific works as a whole contain scientific-applied, scientific-theoretical and scientific-educational contributions that meet the requirements for being hired by academic position "**Professor**". The scientific parameters are in accordance with the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria, the Regulations for its implementation and the Regulations of the MU - Varna. In this regard, as well as based on my personal impressions of Associated Professor Georgieva, I believe that she is a built specialist, researcher and teacher, and possesses the professional qualities and academic potential to occupy the position of "**Professor**".

This gives me the reason to give a **positive assessment** and to recommend and propose to the members of the Honorable Scientific Jury to award Associated Professor Svetlana Fotkova Georgieva, PhD the academic position "**Professor**" in the *Department of Higher Education 7. Health and Sports, Professional Direction: 7.3. Pharmacy in the scientific specialty Pharmaceutical Chemistry*, according to the Law on the Development of the Academic Staff in the Republic of Bulgaria, the Rules for its Implementation and the Rules of the MU - Varna.

Sofia

29.05.2024

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/prof. Maya Georgieva, PhD/