#### REVIEW

#### by Assoc. prof. Hristina Viktorova Lebanova, Ph.D.,

Faculty of Pharmacy, Medical University - Pleven Member of the scientific jury under Order No. P-109-513/30.11.2023 by Prof. Dr. Svetoslav Georgiev, Ph.D., Rector of the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna for obtaining the academic position of "associate professor".

**REGARDING**: procedure for obtaining the academic position " associate professor" in the scientific specialty "Management of public health (process management in pharmacology)", professional field 7.4. Public health, the field of higher education 7. Health care and sports for the needs of the Department of "Pharmacology, Toxicology and Pharmacotherapy" in the Faculty of Pharmacy of the University of Varna, announced in the State Gazette, No. 41/03.06.2022.

### **Biographical data and career development**

Chief Assistant Prof. Maya Radeva-Ilieva was born in the city of Silistra in 1989. She graduated in Pharmacy with full honors from Medical University "Prof. Dr. Paraskev Stoyanov" - Varna in 2015. From January 2020 to April 2022, she was a full-time Ph.D. student at the Department of Pharmacology, Toxicology and Pharmacotherapy in the doctoral program "Pharmacology /including pharmacokinetics and chemotherapy/". She started her professional career as a pharmacy stockkeeper in a community pharmacy, held the position of deputy pharmacy manager, and since 2016 until now she has held the academic positions of "Assistant Professor" (01.2016 - 08.2022) and " Chief Assistant Professor" (08.2022 - until now) at the Department of Pharmacology, Toxicology and Pharmacotherapy, MU-Varna. In 2022 she defended her dissertation thesis in the professional field 7.3 Pharmacy on "Isolation and analysis of methylxanthine fraction, catechin fraction and total Bancha green tea extract and study of their influence on pharmacokinetics of sildenafil in rats" at MU-Varna. Chief Assistant Prof. Radevallieva has a recognized postgraduate specialization in "Pharmacology and Pharmacotherapy" from MU-Varna since January 2024.

The candidate has submitted a certificate that she is fluent in English (level B2).

### Evaluation of quantitative and qualitative indicators

From the provided academic reference, it is clear that the candidate meets the minimum national requirements laid down in the Law on the Development of the Academic Staff in the Republic of Bulgaria for obtaining the academic position of "associate professor" and the requirements of MU-Varna (Table 1). With a required sum of 400 points, chief asst. prof. Radeva-Ilieva has presented evidence for 615.11 points (54% above the requirements).

Table 1. Reference to compliance with the requirements of the position.

A group of metrics		Minimum National Requirements (MNR) - sum of points	Minimum requirements MU - Varna - sum of points	Maya Radeva- Ilieva, PhD
Α	Indicator 1	50	50	50
B C	Indicator 2	-	-	-
С	Indicators 3 or 4	100	100	100
D	Sum of indicators 5 to 9	200	200 (≥80 points for non- clinical specialties from indicator 7)	275,11 точки (120,24 for indicator 7)
E	Sum of indicators from 10 to 12	50	50	190
F	Sum of the indicators from 13 to the end	-	-	-
Total point	S	400 points	400 т. (≥80 т. for indicator 7)	615.11 т. (120.24 points for indicator 7)

Maya Radeva-Ilieva participates in the procedure with 1 dissertation for a PhD degree, 1 monograph, 8 publications, published in peer-reviewed scientific journals, referenced and indexed in Scopus/Web of Science, and 12 publications in non-indexed peer-reviewed journals. 6 of the publications are in journals with impact factor, and according to the submitted report from the library of MU-Varna, Maya Radeva - Ilieva has a total IF of 14,495 (including the publications for obtaining the PhD degree). The impact factor of the publications included in this competition is 9.102. Maya Radeva-Ilieva participates in the procedure with 22 scientific works, all of them, except for the Ph.D. dissertation, published after filling the academic position of "Chief Assistant Professor". In 5 of the publications (25%) the candidate is the first or last author.

Maya Radeva-Ilieva also presents a list of 21 participations in national and 4 in international scientific forums.

The published monograph discusses the health benefits and risks of using phytoproducts containing polyphenolic compounds. The main groups of polyphenolic compounds, which are the largest group of biologically active substances isolated from plants, are discussed in detail. Both the beneficial effects of polyphenols and the potential problems associated with their use, such as organ toxicity, drug-drug interactions, etc., are discussed. Dietary supplements, herbal medicinal products and medical devices containing polyphenols are also presented in the monograph. The monograph focuses on the legal regulation of phytoproducts in Bulgaria and the need for stricter control in the production and marketing of food supplements containing herbal substances. The examples in the monograph are supported by the author's research, a total of 3 of her studies are cited. The presented monographic work fully meets the requirements for it laid down in law.

# Evaluation of the candidate's research activity and contributions

Maya Radeva–Ilieva's scientific research is mainly focused on the field of pharmacokinetics, drug interactions, the study of natural substances and probiotics, pharmacotherapeutic approaches in the treatment of diseases and acute intoxications and clinical pharmacy and public health. The candidate's works present the results of isolation and phytochemical analysis of plant extracts, conducting in vitro and in vivo studies (in experimental animals) of plant and medicinal substances. The topic of the scientific works is in the field of the competition.

I accept the author's statement of contributions, which can be formulated in 4 areas:

- 1. Pharmacokinetics and drug interactions (9 publications, including 2 for PhD)
- 2. Study of natural substances and probiotics (6 publications, including 1 for PhD)
- 3. Pharmacotherapeutic approaches and treatment of acute intoxications (5 publications)
- 4. Clinical Pharmacy and Public Health (4 publications)

I accept the author's reference prepared by the candidate for the **contributions.** In the presented areas, I would like to highlight the following more important theoretical and scientific-applied contributions:

# > Theoretical contributions

1) Potential interactions between tyrosine kinase inhibitors and other drugs are summarized

2) The available data on observed clinically relevant interactions between drugs and green tea (in the form of tea beverage or extract) or epigallocatechin-3-gallate are analyzed and systematized

3) The role of the hospital pharmacist in predicting and preventing drug-drug interactions in hospital settings as well as in subsequent outpatient therapy is analyzed

4) Information on medicinal products derived from marine organisms registered for use is examined and summarized, providing a comprehensive view of the development of marine pharmacology to date

> Applied contributions

1) The potential of plant extracts to inhibit the activity of drug-metabolizing enzymes in vivo was investigated

2) The ability of peptide analogs screened for analgesic activity to inhibit CYP3A4 enzyme activity has also been investigated

3) Two liquid chromatographic methods were developed and validated - an HPLC method for the qualitative and quantitative analysis of caffeine, theophylline and theobromine, and an HPLC method for the qualitative and quantitative determination of epigallocatechin-3-gallate, caffeine, catechin and gallic acid in green tea samples

4) The antioxidant activity of Bulgarian probiotic cultures was also investigated in rats

The candidate's research and relevant contributions are directly relevant to the specialty of the procedure.

According to the submitted academic transcript, Maya Radeva-Ilieva has 12 citations in peerreviewed referenced and indexed publications and 2 citations in non-referenced peer-reviewed journals. It should be noted that this is the minimum number of citations required to meet the requirements for the academic position of associate professor. A reference to the Google Scholar database shows that as of 21 February 2024, the publications of Maya Radeva-Ilieva have been cited 48 times (h-index 4).

# Assessment of teaching activities

Maya Radeva-Ilieva, PhD has teaching experience of 07 years 10 months and 4 days as of 23.11.2023 (6 years 7 months as assistant professor and 1 year 2 months as chief assistant professor). The candidate participates in the training of pharmacy students by conducting seminar exercises in the following subjects:

- 1) Pharmacology to 3<sup>rd</sup>-year students, majoring in Pharmacy;
- 2) Toxicology of 4<sup>th</sup>-year students, majoring in Pharmacy;
- 3) Pharmacotherapy to 5<sup>th</sup>-year students, majoring in Pharmacy

She also participates in the semester examinations of the listed courses. For the last 4 academic years, head Maya Radeva-Ilieva has a total of 944 hours of classroom workload.

### Conclusion

Maya Radeva – Ilieva's scientific publications, necessary documents, and references show that she fulfills and exceeds in a quantitative and qualitative aspect the recommended criteria and the requirements of Law on the Development of the Academic Staff in the Republic of Bulgaria and the Regulations for the development of the academic staff of the MU-Varna for obtaining the academic position "associate professor". The dissertation work, the topics that are included in the monographic work, the publications in peer-reviewed journals, and the reports presented at scientific forums, fully correspond to the subject of the announced competition. The quantitative and qualitative characteristics of Maya Radeva-Ilieva's scientific publications,

including the number of citations and impact factor, are such that they significantly exceed the requirements for obtaining the academic position of "associate professor". The academic workload, the teaching activity and the duration of the occupation of the position of "associate professor"/"chief associate professor" also meet the criteria.

Based on the comprehensive review of the presented scientific works, their significance, the theoretical and applied contributions contained in them, the educational and overall activity and taking into account the presence of full compliance of the scientometric and other indicators with the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria and the Rules for development of the academic staff of the University of Varna for obtaining the academic position "associate professor", I find it reasonable to vote **positively for chief assistant professor Maya Radeva – Ilieva, Ph.D. to be appointed to the academic position** "associate professor" in the scientific specialty "Management of public health (process management in pharmacology)", professional field 7.4. Public health, field of higher education 7. Healthcare and Sports in the Department of "Pharmacology, Toxicology and Pharmacotherapy", Faculty of Pharmacy of the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna.

21<sup>st</sup> February 2024

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Reviewer

Заличено на основание чл. 5, §1, б. "В" от Регламент (ЕС) 2016/679

/Assoc.prof. Hristina Lebanova/