

REVIEW

by Prof. Petko Penkov Marinov, MD, Ph.D.
Dean of the Faculty of Pharmacy, Medical University - Varna

Subject: Competition for the academic position of 'Professor' in the field of higher education 7. 'Healthcare and Sports', professional direction 7.3. 'Pharmacy', specialty 'Pharmaceutical Chemistry', announced in the State Gazette No. 7/23.01.2024 for the needs of the Faculty of Pharmacy, Department of Pharmaceutical Chemistry.

With Order No. P-109-92/21.03.2024 of the Rector of MU - Varna, I have been elected as a member of the Scientific Jury, and according to Protocol No. 1 of the first meeting of the SJ, I have been appointed to prepare a review for the procedure for filling the academic position of 'Professor' in the specialty 'Pharmaceutical Chemistry'. The sole candidate in the competition is Assoc. Prof. Svetlana Fotkova Georgieva, Ph.D. The procedure for the competition has been observed, and the candidate's documents are in accordance with the requirements of the Law on the Development of Academic Staff in the Republic of Bulgaria, the Regulation for its application, and the Regulation for the Development of Academic Staff at the Medical University 'Prof. Dr. Paraskev Stoyanov' - Varna and the criteria laid down therein for filling the academic position of 'Professor'.

Professional qualification:

Assoc. Prof. Svetlana Georgieva was born in 1981 in Burgas. In 2003, she obtained a bachelor's degree in Biotechnology. She completed a master's degree in the same specialty in 2006. In 2016, she completed a second master's degree in Organic Chemistry. She completed a third master's degree in Pharmacy in 2022.

From 2008 to 2011, she was a part-time doctoral student at the Department of Biotechnology, specialty 'Pharmaceutical Chemistry' at Burgas University 'Prof. Dr. Assen Zlatarov' with the dissertation topic 'Biotransformation of compounds with estrogenic activity using immobilized laccase on a polymer membrane in a non-isothermal bioreactor'. From 2008 to 2012, she was an assistant professor at the Prof. Dr. Assen Zlatarov University, Burgas, Medical College, Department of Pharmacy. From 2012 to 2013, she was an assistant professor at MU-Varna, Faculty of Pharmacy, Department of Pharmaceutical Sciences at the Medical University 'Prof. Dr. Paraskev Stoyanov' - Varna. In 2013, she was appointed as an associate professor. Assoc. Prof. Georgieva has extensive managerial experience, having led two terms of Departments at the Faculty of Pharmacy of MU-Varna. From 2014 to 2018, she was the head of the Department of Pharmaceutical Sciences and Pharmaceutical Management, and from 2018 to 2022 - the head of the Department of Pharmaceutical Chemistry. In 2019, she obtained a specialization in Analysis of Medicinal Products according to Regulation No. 1/22.01.2015. Since 2023, she has also been working as a pharmacist in open-type pharmacies. Assoc. Prof. Svetlana Georgieva's total professional experience in the field of 'Pharmacy' is 16 years.

Teaching activity:

Assoc. Prof. Svetlana Georgieva began her teaching career as an assistant professor at Prof. Dr. Assen Zlatarov University, Burgas in 2008. Since 2012, her teaching activity has been associated with the Faculty of Pharmacy at MU-Varna, where she has been an assistant professor, and from the following year she was appointed as an associate professor. As an assistant professor, associate professor, and department head, she organizes and conducts lectures and practical exercises, examination sessions with assistant pharmacists and master pharmacists in the disciplines of 'Pharmaceutical Chemistry', 'Pharmaceutical Analysis', 'Organic Chemistry', 'Inorganic Chemistry', 'Bromatology'. She chairs the commission conducting the State exam in Pharmaceutical Chemistry for master pharmacists from MU-Varna. The total teaching workload for the last 4 academic years is an average of 225 teaching hours per year.

She has participated in 8 research projects, leading 6 of them.

- Project on the topic: 'Synthesis and characterization of a new generation of retinoids', project No. 17011/2017 of the Science Fund at MU-Varna. Financed: 2018, leader: Assoc. Prof. Svetlana Fotkova Georgieva, Ph.D., basic organization: Faculty of Pharmacy, MU-Varna.

- Project on the topic 'Determination of the biological activity of newly synthesized bexarotene analogs' No. 18018/2018 of the Science Fund at MU-Varna. Project leader: Assoc. Prof. Svetlana Fotkova Georgieva, Ph.D., basic organization: Faculty of Pharmacy, MU-Varna.

- Project on the topic 'Synthesis and characterization of new nitroimidazole derivatives' - No. 18019/2018 of the Science Fund at MU-Varna. Project leader: Assoc. Prof. Svetlana Fotkova Georgieva, Ph.D., basic organization: Faculty of Pharmacy, MU-Varna.

- Project on the topic 'Lipid nanoparticles - a modern technological approach for incorporating hyperforin with improved chemical stability into pharmaceutical forms for local application and accelerated wound healing' - No. 18027/2018 of the Science Fund at MU-Varna. Project leader: Assoc. Prof. Velichka Yordanova Andonova, Ph.D., basic organization: Faculty of Pharmacy, MU-Varna.

- Project on the topic 'Prediction of the toxicity of newly synthesized hydrazide and hydrazone derivatives with potential antineoplastic effect' - Contest 'Scientific Research and Artistic Creativity - 2019, University 'Prof. Dr. Assen Zlatarov' - Burgas - Project leader Assoc. Prof. Yana Koleva.

- Project No. 19026 - Science Fund - 'Determination of the antimicrobial activity of newly synthesized nitroimidazole derivatives with potential application in transplant medicine' - Project leader: Assoc. Prof. Svetlana Fotkova Georgieva, Ph.D.

- Project No. 20008 - Science Fund - 'Study of the toxicity of bexarotene hydrazones using *in vitro* and *in vivo* models' - Project leader: Assoc. Prof. Svetlana Fotkova Georgieva, Ph.D.

- Project No. 23009 - Science Fund - 'Design, obtaining and study of isatin hybrid molecules with presumed broad-spectrum antimicrobial activity and potential

application in implantology', with project leader Assoc. Prof. Svetlana Fotkova Georgieva, Ph.D.,

Assoc. Prof. Svetlana Georgieva is a research supervisor for 5 successfully defended doctoral students, being the sole supervisor for two of them:

– **Assist. Prof. Nadya Vasileva Agova** enrolled with Order No. R-109-385 / 06.12.2016 as a doctoral student in an independent study program in the doctoral program 'Pharmaceutical Chemistry' in professional field 7.3 Pharmacy, area of higher education 7. Healthcare and Sports, with the dissertation topic: 'Obtaining and Characterizing Bexarotene Derivatives with Potential Biological Activity,' with scientific supervisors Assoc. Prof. Svetlana Fotkova Georgieva, Ph.D., and Prof. Alexander Borisov Zlatkov, Ph.D. (defended).

– **Assist. Prof. Silvia Yordanova Atanasova-Stamova** enrolled with Order No. R-109-467 / 29.12.2017 as a doctoral student in regular form of education in the doctoral program 'Pharmaceutical Chemistry' in professional field 7.3 Pharmacy, area of higher education 7. Healthcare and Sports, with the dissertation topic: 'Synthesis and Characterization of Substituted Derivatives of Imidazole with Potential Biological Effect,' with scientific supervisors Assoc. Prof. Svetlana Fotkova Georgieva, Ph.D., and Assoc. Prof. Maya Boyanova Georgieva, Ph.D. (defended).

– **Nadya Borislavova Hadzhieva** enrolled with Order No. R-109-42 / 01.02.2019 as a doctoral student in regular form of education in the doctoral program 'Pharmaceutical Chemistry' in professional field 7.3 Pharmacy, area of higher education 7. Healthcare and Sports, with the dissertation topic: 'Synthesis, Structure, and Properties of New Iodine Derivatives of Natural Aromatic Acids,' with scientific supervisor Assoc. Prof. Svetlana Fotkova Georgieva, Ph.D. (defended).

– **Sonya Yordanova Ivanova** enrolled with Order No. R-109-62 / 01.02.2019 as a doctoral student in regular form of education in the doctoral program 'Pharmaceutical Chemistry' in professional field 7.3 Pharmacy, area of higher education 7. Healthcare and Sports, with the dissertation topic: 'New Strategies for Qualitative and Quantitative Analysis of Nitrofurazone and Its New Derivatives,' with scientific supervisor Assoc. Prof. Svetlana Fotkova Georgieva, Ph.D. (defended).

– **Ivelin Rosenov Iliev** enrolled with Order No. R-109-53 / 31.01.20 in regular form of education in the doctoral program in the area of higher education: 7. Healthcare and Sports, professional field 7.3. Pharmacy and specialty 'Pharmaceutical Chemistry' at the Department of Pharmaceutical Chemistry, with a dissertation on the topic 'Synthesis, Characterization, and Study of the Toxicity of Bexarotene Hydrazones,' with scientific supervisors Assoc. Prof. Svetlana Fotkova Georgieva, Ph.D., and Assoc. Prof. Yana Koleva Koleva, Ph.D. (defended).

She is also a research supervisor for five more doctoral students enrolled in regular form of education in the doctoral program in professional field 7.3 Pharmacy and specialty 'Pharmaceutical Chemistry':

– **Ivalina Valeriyeva Vasileva** enrolled with Order No. R-109-391 / 09.10.20 in regular form of education in the doctoral program in the area of higher education: 7. Healthcare and Sports, professional field 7.3. Pharmacy and specialty

‘Pharmaceutical Chemistry’ at the Department of Pharmaceutical Chemistry, with a dissertation on the topic ‘Analysis of Some Natural Quinoline and Pyridine Toxins,’ with scientific supervisors Assoc. Prof. Svetlana Fotkova Georgieva, Ph.D., and Assoc. Prof. Iliyan Kolev, Ph.D.

– **Tanya Nedelcheva Dimova** enrolled with Order No. R-109-385 / 08.10.20 in regular form of education in the doctoral program in the area of higher education: 7. Healthcare and Sports, professional field 7.3. Pharmacy and specialty ‘Pharmaceutical Chemistry’ at the Department of Pharmaceutical Chemistry, with a dissertation on the topic ‘New Aromatic Iodine Derivatives - Synthesis, Structure, Properties,’ with scientific supervisors Assoc. Prof. Svetlana Fotkova Georgieva, Ph.D., and Assoc. Prof. Iliyan Kolev, Ph.D.

– **Stefan Radnev Stefanov** enrolled with Order No. R-109-524 / 02.12.2021 in regular form of education in the doctoral program in the area of higher education: 7. Healthcare and Sports, professional field 7.3. Pharmacy and specialty ‘Pharmaceutical Chemistry’ at the Department of Pharmaceutical Chemistry, with a dissertation on the topic ‘Comparative Analysis of Innovative Semi-Solid Dosage Forms with Included Extract of *Hypericum perforatum* L., Standardized by Hyperforin Content,’ with scientific supervisors Assoc. Prof. Svetlana Fotkova Georgieva, Ph.D., and Assoc. Prof. Velichka Yordanova Andonova, Ph.D.

– **Yordanka Petrova Staneva** enrolled with Order No. R-109-622 / 21.12.23 in regular form of education in the doctoral program in the area of higher education: 7. Healthcare and Sports, professional field 7.3. Pharmacy and specialty ‘Pharmaceutical Chemistry’ at the Department of Pharmaceutical Chemistry, with a dissertation on the topic ‘Isolation and Identification of Long-Chain Polyunsaturated Omega-3 Fatty Acids in Food Supplements,’ with scientific supervisors Assoc. Prof. Svetlana Fotkova Georgieva, Ph.D., and Assoc. Prof. Albena Merdzhanova, Ph.D.

– **Kaloyan Rosenov Mihalev** enrolled with Order No. R-109-624 / 21.12.23 in regular form of education in the doctoral program in the area of higher education: 7. Healthcare and Sports, professional field 7.3. Pharmacy and specialty ‘Pharmaceutical Chemistry’ at the Department of Pharmaceutical Chemistry, with a dissertation on the topic ‘Synthesis and Characterization of Hybrid Molecules with Potential Antimicrobial Activity,’ with scientific supervisor Assoc. Prof. Svetlana Fotkova Georgieva, Ph.D.

Research Activity:

In the competition for the position of professor, Assoc. Prof. Svetlana Georgieva presents a total of 54 scientific works, excluding those submitted for the position of ‘associate professor,’ as well as participation in 8 national scientific or educational projects.

– Monograph ‘Systematic Review of the Properties and Action of Dietary Supplements. Safety and Quality’ - jointly with Nadya Agova.

– 6 scientific publications published in scientific journals, referenced and indexed in world-renowned databases of scientific information, and 27 published in

non-referenced journals with scientific review or published in edited collective volumes.

- 7 published university textbooks.
- 13 full-text publications in scientific journals and collections, beyond the minimum bibliometric requirements for the position of ‘professor.’
- 8 national scientific or educational projects. Assoc. Prof. Georgieva is the leader of 6 national scientific or educational projects and a participant in 2 national scientific or educational projects.
- 87 participations in scientific forums, excluding those in the competition for ‘associate professor.’

The overall impact factor of Assoc. Prof. Svetlana Georgieva is 18.036.

In the published full-text scientific publications in journals and collections, Assoc. Prof. Georgieva is:

- First author in 3;
- Second author in 15;
- Third and consecutive author in 28.

The total number of points according to indicators G5-G9 is 307.8. Full-text publications in scientific journals and collections beyond the minimum requirements for the position of ‘professor’ carry an additional 120.5 points.

Citations of Assoc. Prof. Georgieva's publications, covering the minimum requirements for the position of ‘professor,’ are 8, with the sum of points according to indicators D10-D12 being 120. The sum of points according to indicators E13-E22 is 380.

Evaluation of Scientific Contributions:

Associate Professor Svetlana Georgieva's creative endeavors are directed towards solving important practical questions.

The monograph addresses fundamental issues in the field of the use of dietary supplements. The content is structured into three chapters. The first chapter is dedicated to the classification of dietary supplements and the role of vitamins, antioxidants, minerals, and amino acids as basic dietary supplements, their interactions, individual characteristics, recommended intake, potential benefits and risks of their use, and the risks of their joint use with medicinal products. The second chapter thoroughly examines the regulatory framework related to the production, distribution, and application of dietary supplements. The focus is on key points in European, Bulgarian, and Russian legislation. Prohibited substances for inclusion in dietary supplements, contaminants, and methods for their identification are indicated. The third chapter presents the results of the author's own research regarding market trends regarding dietary supplements, consumer attitudes towards the use of dietary supplements in the city of Varna. Dietary behavior and habits of students from Bulgaria and Russia under the conditions of COVID-19 are also analyzed.

The author's research, reflected in the published articles, covers the following main scientific directions:

– Synthesis and characterization of analogs of nitroimidazole and bexarotene - publications G8-3, G8-6, and G8-18, G8-26, and additional 6, 7, and 11.

– 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 - publications G7-1, G7-2, G7-3, G7-4, G7-5, G7-6, G8-15, G8-17, G8-19, G8-20, G 8-21, G8-22, G8-24, G8-25, G8-27, and additional 8, 9, 10, and 13.

– Safety and quality of foods, dietary supplements, and natural products - publications G8-1, G8-2, and additional 5.

– Tracking trends in modern therapy for socially significant diseases - publications G8-4, G8-5, G8-7, G8-8, G8-9, G8-10, G8-11, G8-12, G8-13, G8-14, G8-16, G8-23, and additional 1, 2, 3, 4, 12.

I believe that the scientific works of Assoc. Prof. Svetlana Georgieva possess modern scientific and applied merits and constitute an original contribution to the field announced in the competition for the professorship in Pharmaceutical Chemistry.

Conclusion:

Based on the materials provided to me for the competition and my personal impressions of Assoc. Prof. Svetlana Georgieva, I am convinced that she fully meets the requirements of the Law on the Development of Academic Staff in the Republic of Bulgaria, the Regulations for its Implementation, and the Regulations for the Development of Academic Staff at the Medical University 'Prof. Dr. Paraskev Stoyanov' - Varna, and the criteria set forth therein for appointment to the academic position of 'professor.' Therefore, I give my positive assessment for the selection of Assoc. Prof. Georgieva as a professor and recommend to the respected members of the Scientific Committee to vote positively for her appointment.

25.04.2024

Varna

Prof. Petko Marinov, MD, Ph.D.

Залчено на основание чл. 5,
§1, б. „В“ от Регламент (ЕС)
2016/679