

## REVIEW

Regarding the competition for the academic position of PROFESSOR

The competition was announced in the State Gazette, issue 41 / 03. 06.2022 for the needs of the Department of "Pharmacology, Toxicology and Pharmacotherapy", Faculty of Pharmacy, Medical University - Varna "Prof. Dr. Paraskev Stoyanov" in the Specialty "Management of Public Health (Management of processes in pharmacology)", Professional direction 7.4. Public Health, Higher Education Area 7. Health Care and Sports.

**REVIEWER:** Corr-member, Prof. Dr. MILA VASILEVA VLASKOVSKA, MD, PhD, Department of Pharmacology and Toxicology, Sofia Medical University. I have been appointed as a member of the Scientific Jury for conducting the competition by order of the Rector of Varna Medical University No. 109-318 / 20. 07. 2022. I have been selected as a reviewer of the candidate by decision of the Scientific Jury with Protocol No. 1/12. 08. 2022.

For participation in the competition, documentation was submitted by the only candidate, Mr. KALOYAN DOBRINOV GEORGIEV, Master of Pharmacy, Doctor of Bioorganic Chemistry, Chemistry of Natural and Physiologically Active Substances, Doctor of Science, Associate Professor at the Department of Pharmacology, Toxicology and Pharmacotherapy of the Faculty in Pharmacy of the Medical University - Varna.

The documentation submitted to me for review was prepared in accordance with the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria, the Regulations for the Application of the Law and the Regulations for the Development of the Academic Staff at the Medical University - Varna " Prof. Dr. Paraskev Stoyanov". The explicit requirement that the candidate possess acknowledged specialties in the health care system in Pharmacology and Clinical Pharmacy is met.

### BRIEF BIOGRAPHICAL DATA

Kaloyan Dobrinov Georgiev was born on September 15, 1978 in the city of Varna. In the period 1997 - 2003, he was a pharmacy student at the Faculty of Pharmacy of the Medical University of Sofia. In 2003, he graduated as a Master of Pharmacy. In the period 2010 - 2013, he was a part-time doctoral student. According to the work experience certificate issued by Medical University - Varna, his total work experience in the specialty is over 17.5 years. He is married. He is fluent in spoken and written German, English and Russian languages.

Professional development: From December 2002 to June 2005, he worked as a master pharmacist in the health care system. After winning a competition in 2005, he was appointed as an assistant at the Medical University - Varna and held this position continuously until 2014. In the period 2014 - 2015, he was a Chief assistant at the Medical University - Varna. In 2015, he was elected for Associate professor of 7.3. Pharmacy, specialty "Biopharmacy and pharmacokinetics" and holds this position at the present. Since January 2016 and currently (with a break from April to September 2020) he is the head of the Department of Pharmacology, Toxicology and Pharmacotherapy of the Faculty of Pharmacy, Medical University - Varna. Since 2010, he has hold an acknowledged specialty "Pharmacology", and since 2018 - second specialty "Clinical pharmacy".

Academic development: In the period 2010 - 2013, he was a doctoral student at the Department of Drug Design and Biochemical Pharmacology at the Institute of Molecular Biology - BAS. In 2013, he defended his thesis "Design, synthesis and pharmacological characterization of peptide mimetics of endomorphin-2, morphiceptin and RGD with analgesic and antitumor activity" and was awarded with the scientific and qualification degree "Doctor". In 2020, he defended his dissertation on the topic "Identification, analysis and evaluation of pharmacokinetic and pharmacodynamic drug interactions", for which he was honored with the scientific degree "Doctor of Sciences" in the specialty "Pharmacology" (including pharmacokinetics and chemotherapy).

## **EDUCATIONAL - TEACHING ACTIVITY**

Kaloyan Georgiev has over 16 years of experience as a university teacher and lecturer. As shown in the issued official report No. 112 / 20. 06. 2022, the study load of Associate Professor Georgiev (study hours / year) is significantly higher (2 - 2.5 times) than the required norm. Below I quote data from the attached reference.

	Lectures	Exercises	Standard
2017/18	197	96	126
2018/19	105	120	126
2019/20	100	88	126
2020/21	120	104	126

Assoc. Prof. Georgiev conducts a wide range of auditory and non-auditory lectures and exercises for students from several disciplines. He is actively involved in teaching the

compulsory disciplines of pharmacology, toxicology, pharmacotherapy, fundamentals of clinical pharmacy, biopharmacy and pharmacokinetics to pharmacy students and pharmacist assistant students. Assoc. Prof. Georgiev has also delivered full cycles of lectures and exercises to students in the field of Health care such as X-ray and medical laboratory technicians, nurses, midwives and rehabilitators. Assoc. Prof. Georgiev was the supervisor of two successfully defended doctoral students (in 2019 and 2022). Currently, six new PhD students have been admitted to the Pharmacology (including pharmacokinetics and chemotherapy) PhD program and are developing dissertations under his supervision. Along with this, he has a teaching load in the postgraduate education programs.

Assoc. Prof. Georgiev is the co-author and editor of the Guide to Pharmacology for Pharmacy Students, 2017 and the Guide to Toxicology for Pharmacists, 2018 and 2020.

### **SCIENTOMETRICAL DATA**

Assoc. Prof. Georgiev submits 14 scientific publications in subgroup G7 (publications referenced and indexed in world-famous databases) for participation in the current competition, and he is the first or the last author of 7 of these publications. Furthermore, he presents another 7 scientific publications in subgroup G8 (non-refereed peer-reviewed journals or edited collective volumes), in 4 of which he is the first or the last author. Another 3 scientific publications are works "outside the minimum scientometric requirements", and in 1 of them he is the last author. Assoc. Prof. Georgiev presents in subgroup G9 (chapter from a collective monograph) Chapter 29. Probiotics: past, present and future challenges. from Problems in the Prevention and Management of Human Diseases. A Scientific Perspective, Elsevier, 2022. In this list, he presents his own monograph "Regulatory aspects in drug interaction studies in preclinical and clinical stages in the creation of new drugs", Varna, 2022. Assoc. Prof. Georgiev is the author of a dissertation work "Identification, analysis and evaluation of pharmacokinetic and pharmacodynamic drug interactions" successfully defended in 2020 for the award "Doctor of Sciences" and of a dissertation "Design, synthesis and pharmacological characterization of peptide mimetics of endomorphin-2, morphiceptin and rgd with analgesic and antitumor activity", successfully defended in 2013 for the award "Doctor".

The academic reference from the Library of the MU - Varna provides the personal scientometric parameters of the publications for participation in the current competition

**According to indicators G5-9: a total of 235.8 points** (mandatory minimum 200 points).

Two of the publications were cited 9 times (indicator D10). One of the publications related to the doctoral dissertation was cited 7 times (indicator D10, cited in world-renowned databases). I accept all provided scientometric parameters.

### **According to indicator D10: total 240 points**

Out of a total of 28 scientific papers (including 2 dissertations and 2 monographs), 16 were published with an Impact Factor (IF), and have a **TOTAL IMPACT FACTOR of 37.364**.

In the given report about Assoc. Prof. Georgiev's participation in scientific events, 20 participations in Bulgaria are indicated, 8 of which in international congresses or symposia and 6 participation in international congresses abroad. In 15 of them, Prof. Georgiev is the first / last author. This shows that he had a leading role in these research collectives. Elementary statistics will show that in the post-habilitation period as an associate professor, he has 3 publications per year, 2 of them in IF journals, and has participated in 4 scientific events each year.

In my opinion, these scientometric indicators significantly exceed the mandatory requirements for holding the academic position of "Professor".

Assoc. Prof. Georgiev is the head of 2 research projects (2016 - 2018 and 2020 - 2022), which are financed by the Science Fund of Varna University of Medical Sciences. He is also a member of the research teams of 2 other research projects with similar funding. The scientific parameters according to indicators E13 (doctor of science), E14 (doctoral students), E15 (specialty), E18 (project manager), E21 (teaching aids), E22 (specialists) are a **TOTAL of 330.86 points**. The requirement for a minimum of 80 points for indicator E14 has been met.

### **ANALYSIS OF SCIENTIFIC ACTIVITY AND MAIN CONTRIBUTIONS**

The main part of the candidate's scientific research is in the field of experimental pharmacology, phytopharmacology and toxicology, clinical pharmacy and pharmacotherapy, which are directly related to the direction in which the competition is announced, namely public health (process management in pharmacology). I accept the attached reference for the scientific contributions in the publications printed after the habilitation as an associate professor. In the analysis of the scientific activity, I will also include contributions as a university professor and expertise as a department head.

(a) In a first-of-its-kind multi-layered pharmacokinetic study and model, new data on potential interaction interactions with *Sildenafil* after repeated administration of Banchar green tea extracts have been obtained.

(b) Cardio- and nephro-protective effect of methylxanthine fraction from Banchar tea was verified for the first time in experimental animals when treated with Doxorubicin. It has been found that simultaneous administration can have a beneficial therapeutic effect.

(c) Extracts of *Lycium barbarum* and methylxanthines from Bancha and Pu-erh were found to inhibit adhesion of herpes viruses and protect uninfected cells from viral invasion.

(d) The first retrospective studies were conducted on the frequency, severity, prevalence and population distribution of acute intoxications with narcotic substances, benzodiazepine and hypnotic drugs in the Varna Region for a period of 25 years (1991 - 2015).

(e) Individualized predictions for hospital treatment of acute organophosphorus pesticide poisonings were developed. The main clinical indicators, which are important for the prognosis of these intoxications, have been determined.

(f) The first retrospective studies were conducted on the incidence, severity, the prevalence and population distribution of acute mushroom poisoning in the Varna Region for a period of 25 years (1991 - 2015).

(g) The first retrospective studies on the incidence, severity, prevalence and population distribution of acute methanol intoxications in the Varna Region over a 10-year period were conducted. It was established that the most affected are people aged 45 - 60 years and the mortality rate is over 30%, the frequency of intoxication in men is 3 times higher than in women.

(h) For the first time the hepatoprotective effect of a probiotic food containing strains of *Lactobacillus bulgaricus*, *Lactobacillus helveticus* DWT2, *Lactobacillus lactis* DWT3 and *Streptococcus thermophilus* DWT3, 5, 6, 7 was studied in laboratory animal experiments.

(i) Student teaching aids have been created in which anti-neoplastic drugs are divided into subgroups of classical and targeted chemotherapy. The toxicology course material profile is focused on drug toxicology.

## CONCLUSION

Assoc. Prof. Kaloyan Georgiev is a university lecturer with established authority and excellent expertise as a head of a university department. The scientometric parameters of teaching and scientific activity significantly exceed, in some aspects many times, the criteria for occupying the academic position of "professor". Assoc. Prof. Georgiev has made significant scientific contributions in the fields of pharmacology, toxicology and clinical pharmacy, which are directly related to the professional direction in which the competition is announced. I want to highlight his affinity for research with a clear clinical focus, especially in the field of clinical pharmacy. I want to emphasize that Assoc. Prof. Georgiev has a Doctor of Science degree since 2020.

On the basis of the above and of the detailed analysis in the review, with complete conviction I will vote "YES" and suggest to the other members of the scientific jury to vote "YES" that Assoc. Prof. Kaloyan Dobrinov Georgiev, PhD, Doctor of Sciences, to be elected as a **Professor** in the specialty "Management of public health (Management of processes in pharmacology)", Professional direction 7.4. Public Health, Higher Education Area 7. Health Care and Sports.

03.10.2022

Reviewer:..........

/Corr.-member, Prof. Dr. Mila Vasileva Vlaskovska, MD, PhD