



OPINION

on the materials for participation in a competition for the academic position of "Associated professor" at the department of "Plant Pathology and Chemistry" in the field of higher education 6. "Agrarian Sciences and Veterinary Medicine", professional direction 6.4. "Veterinary Medicine", scientific specialty "Animal Pathology" in the discipline "Biochemistry", announced by University of Forestry (UF) in State Gazette No. 24/25/03/2022 and procedure code ELA-AsP-0322-81.

Candidate for participation in the competition: Chief assistant professor **Metodi Hristov Petrichev, PhD**, lecturer in the Department of "Plant Pathology and Chemistry" at the Faculty of Ecology and Landscape Architecture of UF.

Prepared the opinion: Prof. D.Sc. Dr. **Teodora Petrova Popova**, University of Forestry, Sofia, higher education field "Agrarian Sciences and Veterinary Medicine", professional direction: 6.4. "Veterinary Medicine", scientific specialty "Epizootology, infectious diseases and prevention of infectious diseases in animals", appointed as a member of the Scientific Jury by Order No. ZPS-233/25.05.2022 of the Rector of UF - Sofia.

Brief biographical data about the applicant.

Metodi Petrichev has a master's degree in veterinary medicine, graduated from the Faculty of Veterinary Medicine (FVM) at UF in the city of Sofia in 2001. He worked in his specialty as a veterinarian in private practice in the municipality of Dragoman (2001-2002). Also he was a teacher of veterinary medicine at the Professional High School of Veterinary Medicine and Agriculture "St. Georgi Victorious" - Kostinbrod (2002). In 2005 he defended his Doctor's thesis in FVM at UF and obtained the Educational and Scientific Degree (ESD) "Doctor of Veterinary Medicine" (PhD). In the period 2006 - 2014, he practiced as a veterinarian in "Sudahim Ltd." - Sofia. During the same period, he was Head of the National Reference Laboratory "Mycotoxology and Ecotoxicology" at the Bulgarian Food Safety Agency - National Diagnostical and Research Veterinary Medical Institute (NDRVMI) in Sofia - 4 years and Chief Assistant in the same laboratory - 5 years. He also worked as a veterinarian at the "Care for them" Veterinary Clinic - Sofia (2015). During the next two years, he was the Head of the Laboratory at RVS Ruse Ltd. in his hometown Ruse, after which he started working at UF (2017) as an Assistant professor in the Department of "Plant Pathology and Chemistry". From September 2019 to the present, he is the Chief assistant professor in the Biochemistry discipline in the same department. Dr. M. Petrichev has undergone training to improve his qualifications and has certificates for "Increased level of official control on certain feed and food of non-animal origin" from the European Commission DG "Health and Food Safety" - Pisa, Italy (2010) and in Naples, Italy (2011) and in "Pharmacokinetics" from the European Association of Veterinary Pharmacology and Toxicology / European College of Veterinary Pharmacology and Toxicology - Lisbon, Portugal (2003). He speaks English, Russian and German.

Conformity of the applicant's submitted documents and materials with those required according to the Regulations for DAS at UF.

Ch. assistant professor Dr. M. Petrichev has submitted all the documents necessary for participation in the competition for the academic position "Associated professor", prepared according to the requirements of the professional direction and the Regulations for DAS at UF.

Assessment of the candidate's educational and teaching activities.

Dr. Petrichev's teaching experience at the university is almost five years, starting in September 2017 upon his admission as an Assistant professor in the department of "Plant Pathology and Chemistry" at FELA at UF. He has been a Chief assistant professor for 3 years now (from 09.2019 to the present). Ch. assistant professor Petrichev conducts practical classes on the subject of Biochemistry with students from two majors: "Veterinary Medicine" (Master's) with the courses in Bulgarian and English and "Ecology and Environmental Protection" (Bachelor's) in Bulgarian. His His auditory employment is **over 400 hours** a year in the Bulgarian language course, which exceeds the required minimum academic attendance of 360 hours. In addition, he conducts an additional **260 hours** a year in English in the foreign language training.

These data clearly show that Ch. assistant professor Dr. Petrichev has a **sufficiently long teaching experience** in conducting classes with students in the course taught by him in both specialties, fulfilling the mandatory academic employment. This experience is also enriched through the teaching in English in the same academic discipline.

Evaluation of the candidate's scientific, applied scientific and publication activities

The scientific experience of Dr. M. Petrichev is a total of 14 years (9 years and 6 months at NDRVMI as an Assistant professor and Chief assistant professor and over 4 years and 6 months at UF). During this period he had the following scientific results. To participate in the competition for an associate professor, he submitted a total of **30** scientific works, which do not repeat those for the acquisition of the ESD "PhD". The materials for the ESD "PhD" include a dissertation, an abstract and 4 publications, 2 of which in English (in the journals "Folia Veterinaria" and "Experimental Pathology and Parasitology") and 2 in Bulgarian in the journals "Veterinary Medicine" and "Animal Sciences". Three of them are independent, and one has two authors, with Dr. M. Petrichev as the leading author. There are also three participations in scientific conferences, one of them abroad - in the city of Turin, Italy.

The total number of points obtained by the candidate under the groups of indicators for AP "Associated Professor" is **503.44** at minimum national requirements of 400 points, as follows:

- According to indicator 1 (group A), Dr. Petrichev has 50 points out of 50 required - for a dissertation work for the acquisition of the ESD "PhD" on the topic "Bioavailability, clinical efficacy and toxicity of iron methionate in laboratory animals and pigs" defended in 2006.

- According to indicator 2 (group B) – 0 points out of 0 required.

- According to the indicators from group B - 100 points out of 100 required, obtained from habilitation work - monograph on the topic "Mycotoxins in productive animals and basic methods for the analysis of mycotoxins", published in 2021, CD, ISBN 978-619-91033-3-3.

- According to the indicators from group Γ - 223.44 points out of 200 required, of which: ♦ Articles and reports published in scientific publications, referenced and indexed in world-famous databases with scientific information - 14 nos. – 181.78 points. ♦ Articles and reports published in non-refereed peer-reviewed journals or in edited collective volumes - 15 nos. – 41.66 points.

- According to indicators from group D, the candidate received 130 points out of 50 required, of which 75 points from 5 citations of 5 publications in scientific publications, referenced and indexed in world-famous databases with scientific information or in monographs and collective volumes (15 points for each); 10 points from 1 citation in a monograph and 45 points from 9 citations of publications in non-refereed peer-reviewed journals (5 points for each).

- According to the indicators from group E – 0 points out of 0 required.

The total number of points obtained by Dr. Petrichev on all indicators (503.44) significantly exceeds the minimum required to fulfill the minimum national and additional requirements for professional fields, determined by the Regulations for the Implementation of the Law on the Development of the Academic Staff in the Republic of Bulgaria and LDAS of UF for occupying an academic position "Associated professor" in the field of higher education 6. Agricultural sciences and veterinary medicine.

Participation in scientific, scientific-applied and educational projects

Ch. Assistant Professor Dr. Petrichev has participated in three scientific projects at NDRVMI, Sofia, namely: ♦ Cipher 5.2/2005 "Possibilities of using copper methionate for the prevention of trace element deficiency in laboratory animals, pigs and lambs"; ♦ Cipher 5.16/2005 "Investigation of feed contamination with xenobiotics and potential toxicological risks in animals" and ♦ Cipher 5.17/2006 "Investigation of FOS and CS intoxications in wild mammals and birds". He also participated in two contractual projects with departments and companies external to NDRVMI.

Characteristics of published scientific results

Those presented by Ch. assistant professor Dr. M. Petrichev scientific publications for participation in the competition for Associated professor are 30 in total. These include a habilitation thesis - monograph, 14 articles and reports published in scientific issues, referenced and indexed in world-renowned databases of scientific information, and 15 articles and reports published in non-refereed peer-reviewed journals or in edited collective volumes. The large number of publications in refereed scientific journals is an indicator of the importance of his research and publication activity.

Due to the growing role of mycotoxicoses in agriculture and people's lives, I consider the presented habilitation work on this topic to be particularly relevant and valuable. This also applies to the articles published in specialized publications, especially those referenced and indexed in world-renowned databases.

Reflection of the candidate's scientific activity in the literature (citability)

Five of the candidate's articles are cited in scientific publications, referenced and indexed in world-famous databases with scientific information or in monographs and collective volumes, one - in a monograph in Bulgarian and 9 - in non-refereed journals and books with scientific reviewing, most of which - foreign. These results are a good indicator of the impact of his production among specialists in our country and abroad.

Contributions in the candidate's works (scientific, scientific-applied, applied)

Dr. Petrichev's scientific and scientific-applied contributions are in five main directions:

- ♦ Pharmacology (9 contributions related to the pharmacokinetics and clinical efficacy of various VMPs in animals).

- ♦ Toxicology (6 contributions concerning the determination of the toxicity and assimilation of some veterinary medicinal products in animals).

- ♦ Ecotoxicology. Against the background of increasing bee mortality in our country and on a global scale, I consider the four contributions related to chemotoxicological analyzes of the causes of mortality in bees, wild animals and birds, which is most often caused by anti-cholinesterase pesticides, to be particularly relevant and important. The great toxicological risk of the application of these pesticides has been proven. In addition, the positive effect of activated waters on plants after chemical effects reproducing acid rain has been established.

- ♦ Mycotoxicology. Aflatoxicosis has been studied, the oral toxicity of aflatoxins in animals has been established, and biochemical tests have been examined that can be used as

indicators of such poisonings. The production of ochratoxins during wheat storage was investigated and their toxicity to snails was determined. The content in feed and the action on animals of the fusariotoxins deoxynivalenol, zearalenone and fumonisin were investigated. Of important practical value are the studies of different methods for the analysis of mycotoxins and the establishment of the importance of the method of sampling for the accuracy of the results.

♦ Assessment of the risk of feed raw materials and feeds (an assessment was made of the contamination of different feeds with anti-cholesterase pesticides and of the toxicological risk when they are taken by different animals).

Apart from the contributions from the research activity, Ch. assistant professor Dr. Petrichev also has participated in the preparation of the curriculum for the discipline of Biochemistry from the specialty "Veterinary Medicine", EQD "Master". He is also a member of the editorial boards of 4 scientific journals published abroad.

Evaluation of the candidate's personal contribution

The personal contribution of Ch. assistant professor Metodi Petrichev in the presented scientific research production is seen in the first place by the significant number of his independent publications. He is the sole author of a monograph and 4 articles in refereed specialized journals. This outlines his experience and opportunities for independent research and publication activity. In another six of the publications, he is the lead author. In the rest, he is in third or subsequent places. This active participation in leading positions in the scientific collectives presents Dr. Petrichev as an established scientist with significant personal involvement in the developments.

Critical notes and recommendations

I would recommend Dr. Petrichev to continue his active research activity on current problems, striving to publish the results in journals, referenced and indexed in world-renowned databases.

When presenting the points for some of the indicators for self-evaluation of scientific research activity, technical errors are identified, which should be tried to be avoided.

Personal impressions

I have known Metodi Petrichev since his student years, as I was his teacher. He is one of the standout students who is remembered. Responsible, diligent, disciplined and ethical, he actively participated in classes. Respected and valued by his colleagues and teachers. The qualities and experience he acquired in his practice as a veterinarian, researcher and head of a specialized laboratory are essential for his successful development as a scientist and teacher at present, and I firmly believe - in the future as well.

Conclusion

From the submitted materials for participation in the competition for AP "Associated professor" it is clear that Chief assistant professor Dr. Petrichev is a well-established researcher with a long 14-year scientific experience. His scientific publications for participation in the competition are 30 in number, and almost half of them are published in scientific issues, referenced and indexed in world-famous databases with scientific information. The contributions of his works are relevant and valuable. They are in five different directions, which is an indicator of a versatile and rich research experience.

Citations are sufficient in number and also testify to the significance of the candidate's scientific output. The total number of points obtained by him in the groups of indicators for AP "Associated professor" is 503.44 and significantly exceeds the minimum national requirements of 400 points. By all the necessary indicators, it meets, and by some exceeds, these requirements. Also Ch. assistant professor Dr. Petrichev has a sufficiently long teaching experience in conducting classes in the Biochemistry discipline with students from two majors, fulfilling and re-fulfilling the mandatory academic employment. Teaching the same subject in English further enriches this experience. All this gives me reason to confidently propose the candidate **Chief assistant professor Metodi Hristov Petrichev, PhD, to take the academic position "Associate Professor"** in the field of higher education 6. "Agrarian Sciences and Veterinary Medicine", professional direction 6.4. "Veterinary Medicine", scientific specialty "Animal Pathology" in the discipline "Biochemistry", in the Department of "Plant Pathology and Chemistry" at FELA, UF, Sofia.

07.07.2022.

Prepared the opinion:

Sofia

(Prof. D.Sc. Dr. T. Popova)

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