



## STATEMENT

regarding the competition for "associate professor" in the scientific specialty Ecology and ecosystem protection, announced in SG no. 7 of 23.01.2024 with candidate Chief assistant professor Slaveya Tencheva Petrova, PhD by prof. DSc Neli Hristova Grozeva determined according to Order No. RD 16-403/ 20.03.2024 of the Rector of the Agricultural University - Plovdiv as a member of the Scientific Jury

### 1. Brief introduction of the candidate

Only one candidate submitted documents for participation in the competition - Slaveya Tencheva Petrova, Chief assistant professor, PhD at the Department of "Microbiology and Environmental Biotechnologies", Faculty of Plant Protection and Agroecology, Agricultural University. The submitted materials are in accordance with the requirements of the Law on Development of the academic staff in the Republic of Bulgaria and the Regulations for its implementation, as well as with the Regulations for the implementation of the Law on the development of the academic staff at the Agricultural University - Plovdiv.

The candidate in the competition Chief assistant professor Slaveya Petrova, PhD, completed her secondary education at Prof. Dr. Asen Zlatarov Foreign Language School - Haskovo. In 2006, she obtained a bachelor's degree in Ecology and Environmental Protection, and in 2008 a master's degree in Ecology and Ecosystem Protection at Paisii Hilendarski University of Plovdiv. For the period 2009-2012, she was a PhD student at Paisii Hilendarski University of Plovdiv, developing a dissertation on the topic "Passive and active phytomonitoring of atmospheric pollution in the city of Plovdiv". From 2011 to the present, Slaveya Petrova works as Chief assistant professor in the Faculty of Biology of Paisii Hilendarski University of Plovdiv. Since 2017, Petrova has been working as Chief assistant professor on a second labour contract at the Department of "Microbiology and Environmental Biotechnologies" at the Faculty of Plant Protection and Agroecology of the Agricultural University.

### 2. General description of the scientific production

In the competition for „Associate professor“ Slaveya Tencheva Petrova participates with a total production of 22 papers, grouped as follows:

\* Scientific publications on the nomenclature specialty - 25 issues, of which:

- Publications related to her PhD dissertation - 3 issues, which are not subject to consideration;
- Publications with an impact factor – 10 issues;
- Publications in peer-reviewed and refereed scientific journals – 12 issues.

The candidate's personal participation in the mentioned 22 papers is illustrated by the fact that in 1 of them she is sole, in 10 she is the first, in 2 she is the second, and in the remaining 9 she is third or other author.

\* Textbooks – 1 item.

\* Study guides – 1 item.

The candidate Slaveya Petrova meets the minimum number of points required by the Law on the Development of the Academic Staff in the Republic of Bulgaria for holding the academic position of "associate professor" in the field of higher education 4.

Natural sciences, mathematics and informatics, professional direction 4.3. Biological sciences, scientific specialty Ecology and protection of ecosystems.

The scientific contributions in the publications submitted for participation in the competition with author and co-author Slaveya Petrova are in the field of ecology, protection and sustainable management of the environment and are in full compliance with the scientific specialty of the announced competition.

To prepare the opinion, 22 scientific publications are subject to analysis.

### **3. Teaching activity**

Candidate Slaveya Petrova has teaching experience by the beginning of the competition, respectively: 12 years, 10 months and 19 days under her first employment contract at Paisii Hilendarski University of Plovdiv; 6 years and 11 months under her second labour contract at the Agricultural University, equated to 8 hours of work time.

#### *Academic employment*

For the period from the academic year 2018/2019 to the academic year 2022/2023 Chief assistant professor Slaveya Petrova, PhD, conducted a total of 945.6 study hours with students from Bachelor and Master programs at the Agricultural University.

#### *Published study materials*

Slaveya Petrova is a co-author of a textbook on Biological Agriculture and Agrobiodiversity, and a Guide to Pollution, Water Protection and Impact on Ecosystems, published by Paisii Hilendarski University Publishing House, Plovdiv.

### **4. Scientific research activity.**

#### *Areas of publication*

The candidate indicates her contributions in four main scientific areas: ecology of natural ecosystems; urban ecology; organic farming and research on sorghum cultivars. I accept all contributions as presented in the reference without objection.

In the field of ecology of natural ecosystems has been studied the accumulation of heavy metals and potentially toxic elements in commercial fish species and their impact on organisms (Publications Г4, Г5, Г6, Г7) and the possibilities for sustainable management of the Nature Park "Strandja" (Publications B5, B10).

In the field of urban ecology, have been investigated the possibilities for passive and active phytomonitoring in the assessment of atmospheric pollution in an urbanized environment (Publications B2, Г1, Г2, Г3, Г8, Г9); the pollution of urban soils and their sustainable management (Publications B6, B9, Г12), the influence of external factors on human health and reproductive abilities (Publication B3).

In the field of organic farming, the following have been studied: the possibilities of using allelopathic relationships in organic farming (Publication B1); the effect of different agricultural practices on soil biodiversity (Publication Г11); the contamination of agricultural land with microplastics and their uptake by plants (Publications B7, B8)

In the field of sorghum cultivar breeding has been made selection of suitable hybridization donors carrying genes for higher temperature tolerance and higher adaptive potential (Publication Г10) and have been studied the possibilities for improving germination and growth through growth regulators (Publication B4).

*Citation and referencing of scientific production*

Chief assistant professor Slaveya Petrova, Ph.D., submits 35 citations in scientific publications, referenced and indexed in world-renowned databases with scientific information (Web of Science and Scopus) for participation in the competition.

The search for the candidate in Scopus shows that Slaveya Petrova has currently 36 scientific publications registered, 211 citations and h-index 8. This data undeniably shows her international recognition and proves her contribution to science.

*Participation in scientific projects*

The candidate has participated in a total of 6 national scientific projects and programs related to the subject of the announced competition.

**5. Notes and recommendations.**

Inaccuracies have been identified in the presented report in regards to the impact factor of the scientific works, prepared by Chief assistant professor Slaveya Petrova, PhD. Publications numbered 8 and 10 do not have an impact factor, and inaccuracies were made when indicating the impact factor for publications numbered 3, 4, 11 and 12. This does not diminish the significance of the candidate's scientific works and contributions in the field of ecology and ecosystem protection.

I recommend to Slaveya Petrova to continue with her active project participation and to make efforts to join international scientific projects as well.

**6. Conclusion**

Based on the analysis of the pedagogical, scientific and scientific-applied activities of the candidate, I consider that Chief assistant, Slaveya Tencheva Petrova, meets the requirements of the Law on the Development of Academic Staff and the Regulations for its application. From the presented reference, it is clear that she is a well-established scientist and established university professor in the field of ecology and ecosystem protection. All this gives me reason to **POSITIVELY EVALUATE** her overall activity. I would like take the opportunity to propose to the honorable Scientific Jury to also vote positively, and the Faculty Council of the Faculty of Plant Protection and Agroecology at the Agricultural University - Plovdiv to elect Chief assistant Slaveya Tencheva Petrova, PhD, as an "Associate professor" in the scientific specialty Ecology and Ecosystem Protection.

Date 25/04/2024

Prepared statement:.....  
Prof. DSc Neli Grozeva