OPINION

ЛЕСОТЕХНИЧЕСКИ УНИВЕРСИТЕТ ФАКУЛТЕТ ПО ГОРСКО СТОПАНСТВО Регистрационен индекс на дата

on the materials submitted for participation in a competition for the academic position of "Associate Professor" in the field of higher education 6. Agricultural Sciences and Veterinary Medicine, professional field 6.5. Forestry, scientific specialty "Forest Reclamation, Forest Protection and Special Uses in Forests", in the discipline "Soil science with basics of fertilization".

In the competition for associate professor, announced in the State Gazette, issue 28/01.04.25/ page 20 and on the website of the University of Forestry with the procedure code FOR-AsP-0325-162 for the needs of the Department of Forestry at the Faculty of Forestry, the candidate is Chief Assistant Professor Dr. Kameliya Georgieva Petrova, Faculty of Forestry, Department of Forestry.

<u>Prepared by:</u> Doctor of Sciences Lyudmila Dimitrova Malinova, Professor at the University of Forestry (UF) – retired.

1. Brief biographical data of the candidate

Kameliya Georgieva Petrova was born in 1987 in the city of Sliven, currently living in Sofia. In 2013 she graduated as a "Master" in Forestry at the University of Forestry. During the period 2016-2020 she was an assistant at the Department of Soil Science, where she conducted exercises in the discipline "Forest Soil Science".

In 2020, she defended her dissertation on the topic "Updating the classification of soils from the territory of the Training and Experimental Forest Range (TEFR) Petrohan" and acquired the educational scientific degree "Doctor" and continues her work and scientific work in the department of Silviculture at the University of Forestry until now.

She is a member of the editorial board of the Bulgarian Journal of Soil Science and has a Diploma from the Federation of University Unions "FUNIS"-2023 for high results in scientific activity. She specialized at Alice Holt Lodge, United Kingdom - Forest Research Institute - in 2018. She has completed a course on the operation and maintenance of an Automatic ICP-OES Spectrometer, model Plasma Quant PQ 9100, Analitik Jena, 06.07.2023.

2. Correspondence of the submitted documents and materials of the applicant according to the Rules of the Development of academic staff at the University of Forestry.

The basis for assessing the candidate's publication activity is the submitted report on the candidate's activities according to the requirements of the University of Forestry. Full compliance and coverage of the indicators in the submitted documents and materials of the candidate with those required according to the Regulations for Rules of the Development of academic staff in the UF is taken into account.

3. Assessment of the candidate's educational and pedagogical activities

Over the past 5 years, Dr. Petrova has an average of over 350 hours of classroom work and over 15 hours of extracurricular work per year.

She was the supervisor of 1 graduate student.

Chief Assistant Professor Dr. Kameliya Petrova is leading a lecture course on the subject "Soil Science with Basics of Fertilization" with students majoring in Landscape Architecture, full-time study in the academic years 2022/2023, 2023/2024 and 2024/2025.

She is the head of the practice in "Soil Science with Basics of Fertilization" for the specialty Landscape Architecture, 1st year, full-time study, Master's Degree for the academic years 2020/2021, 2021/2022, 2022/2023, 2023/2024, 2024/2025.

4. Assessment of candidate's scientific, scientific-applied and publishing activities

General description of the presented materials

The candidate Chief Assistant Professor Kamelia Georgieva Petrova, PhD, participated in the competition with:

- A Publications 27 pcs.
- A Projects a total of 11 pcs.

4.1 Participation in scientific, scientific-applied and educational projects

Chief Asst. Prof. Dr. Petrova participated in 11 scientific projects.

She also participated in:

- participation in the National Program of the Ministry of Education and Science in Bulgaria "Young Scientists and Postdoctoral Fellows". 2018-2021.
- participation in the GLOSOLAN course on implementing standard laboratory procedures for the study of organic carbon (titration and colorimetric methods), 17.11.2021, FAO, United Nations.
- participation in a scientific network, as an associate advisor in the World Association of Soil and Water Conservation (WASWAC). 2023-2025.

4.2 Characteristics of the published scientific results

The scientific papers and publications submitted for participation in the competition are 27, including:

Publications in refereed and indexed scientific journals, series and conference proceedings – Web of Science and SCOPUS – 27;

The scientific research, scientific-applied, educational and infrastructure projects submitted for participation in the competition are -11 pcs., including:

- Scientific-research projects funded by the FU under Regulation No. 9- 6 pcs.;
- National educational projects 4 pcs.;
- Scientific-applied projects funded by the Educational and Experimental Forestry Farms (EFF) of the UF -1 pc.

4.3 Reflection of Candidate's Scientific Publications in Literature (known citations)

♣ Total – 6 citations.

According to the type of citations:

- ♣ In refereed journals and proceedings of scientific forums 6 citations;
- ♣ In textbooks, monographs, dissertations, etc. no citations are indicated.

4.4 Contributions to the candidate's work (scientific, scientific-applied, applied)

In her scientific research work, Dr. Petrova mainly brings out 3 main contributions, which I allow myself to quote verbatim, as they have a significant scientific contribution, namely:

- For the first time in Bulgaria, the initial stage of the podzolization process, occurring in brown forest soils formed under the influence of a broad-leaved stand of common beech (*Fagus sylvatica* L.) on the territory of the Training and Experimental Forest Range Petrohan (G7_1), has been studied and proven.
- For the first time, basic soil parameters that have a direct relationship with the growth and development of the fruiting bodies of the common black summer truffle (*Tuber aestivum* Vittad.) on the territory of Western Bulgaria have been studied. An assessment of the soil parameters of the soils in which the largest reserves of the fruiting bodies have been established has been carried out and compared with those in which their quantity is the smallest (G7_9 and G7_14).
- An approach is proposed for studying data obtained in relation to the study of interrelationships in the system "soil-soil microorganisms-tree composition", using GIS. Territorial units have been identified on the territory of the Vitosha Nature Park, in which soils, microorganisms and basic taxonomic parameters of forest stands have been studied. Conclusions have been drawn regarding the specifics of the methodology used in the GIS environment for selecting suitable sites for conducting field surveys (G7 10).

Regarding scientific and applied contributions, I believe that they are expressed primarily in studies, research, assessments and obtaining information about - parameters of peat soils, assessment of C-factor values in determining the potential soil erosion risk, assessment of the chemical composition of different fractions of wood, detailed microbiological studies of soils of the Cambisols class on the territory of the "Vitosha National Park", innovative study of the catalase activity of microorganisms that develop in MGP and soils on the territory of the "Vitosha Nature Park", innovative study on the catalase activity of microorganisms that develop in dead forest floor and soils on the territory of Vitosha Nature Park, determination of basic soil parameters directly related to the fertility of soils on the territory of the Botevgrad Valley. Basic microbiological indicators of soils in spruce (*Picea abies* Karst.) stands were studied, in which a permanent growth depression was established through dendrochronological analysis, and the main components of the forest landscape, such as the diversity of soil-forming rocks and the morphometric characteristics of the relief on the territory of the Pirin National Park, were studied in relation to the soil health of the Cambisols.

5. Assessment of the applicant's personal candidate

The candidate, Dr. Kameliya Petrova, has a prominent place in the presented scientific works: Number of co-authors: independent -2 pcs., with one co-author -6 pcs., with two co-authors -11 pcs., with three or more co-authors -8 pcs.

Language in which they were published - in Bulgarian -2, in a foreign language -25.

6. Critical remarks

I consider the scientific works developed by Chief Assistant Professor Dr. Kameliya Georgieva Petrova to be up-to-date. I have no critical remarks regarding her scientific works and activities.

7. Personal impressions

I know Chief Asst. Prof. Dr. Kameliya Georgieva Petrova as very hardworking, persistent in the scientific search for new knowledge, creating contacts with other scientists and a fair partner in joint work. I wish her to be as persistent and bold in her future work.

8. Conclusion

In connection with the above, I propose that Chief Assistant Professor Dr. Kameliya Georgieva Petrova be elected as an "Associate professor" in the discipline "Soil Science with basics of fertilization" in Professional field 6.5. Forestry, scientific specialty "Forest Reclamation, Forest Protection and Special Uses in Forests".

Prepared the opinion:
/Prof. DSc. Lyudmila Dimitrova Malinova/

The opinion was submitted to:01.08.2025.