АГРАРЕН УНИВЕРСИТЕТ гр. Пловдив
Вх. № 4000 Дело № 11
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STATEMENT

Concerning the competition for "Associate Professor" in the Scientific Specialty "Melioration" announced in the State Gazette No. 98 of 17.11.2020 with candidate Chief Assistant Radost Petrova Petrova, PhD

<u>From</u> Viliana Marinova Vasileva, Member of the Scientific Jury appointed pursuant to order No. RD 16-10/19.01.2021 of the Rector of the Agricultural University – Plovdiv

1. Brief introduction of the candidate.

Radost Petrova Petrova was born on September 12, 1985 in Karlovo town, Plovdiv region. In 2008 she graduated with excellent marks higher education and obtained a Bachelor's degree in the Specialty "Agronomy-Hydro melioration", professional qualification an Agronomist. She completed a Master's course in "Decorative Plants and Landscape Design", professional qualification Agronomist in 2009 with excellent marks too, and acquired a Master's degree. In 2014 she defended a dissertation and received the educational and scientific degree "Philosophy Doctor" in the Scientific Specialty "Melioration (including soil erosion and its control)". Since May, 05, 2009 to January, 19, 2015 she held the position of "Assistant", and since January, 19, 2015 she is currently "Chief Assistant" at the Department of "Melioration, Land Management and Agro physics" of the Agricultural University-Plovdiv.

2. General description of the scientific production.

In the competition for "Associate Professor" Chief Assistant Radost Petrova, PhD participates with a total production of 67 works, grouped as follows:

- -Scientific publications on the nomenclature specialty 65 issues, including:
- -Publications related to the PhD thesis 4 issues not subject to review;
- -Habilitation work (monograph) -1 issue;
- -Publications with impact factor 1 issue;
- -Publications submitted in referenced and indexed issues in the world-famous scientific information databases 16 issues;
- -Publications submitted in non-refereed peer-reviewed journals or in edited collective volumes -43 issues.

The results of the scientific production Chief Assistant Radost Petrova, PhD presents at scientific forums held in Bulgaria (Ruse, Stara Zagora) - 12 oral presentations and 37 posters, and at international conferences abroad - 3 posters.

The personal participation of Chief Assistant Radost Petrova, PhD in these 61 works is illustrated by the fact that in 24 issues is first (39.3%), in 23 issues is second (37.7%), and in the remaining 14 issues (23.0%) – is third and next author.

The monograph written titled "Irrigation of garden beans" (339 pages) is co-authored with Prof. Alexander Matev, PhD and the candidate occupies the first place in the author's team.

For the preparation of this statement 61 scientific works are subject to analysis.

3. Pedagogical activity.

Chief Assistant Radost Petrova, PhD as of December, 01, 2020 has 11 years and 06 months of experience as a "lecturer" at the Agricultural University - Plovdiv (Certificate issued by LS-134 /December, 03, 2020). The direct classroom employment from lectures, exercises and extracurricular employment for the period 2015-2020 amounts to 2059.4 hours. The average annual workload is 412.0 hours, which determines a relatively high employment rate when working with students from the "Melioration" speciality. Chief Assistant Radost Petrova, PhD gives lectures on the disciplines "Irrigation and drainage", "Technologies for irrigation of parks" of full-time and part-time students; exercises in the disciplines "Irrigation and drainage", "Irrigation regime", "Irrigation techniques for parks", "Irrigation technologies in vineyards". The pedagogical activity is supplemented by the management of 8 successfully defended graduates - students from the Faculty of Viticulture and Horticulture at the Agricultural University - Plovdiv (period 2011-2020).

4. Research activity.

Areas of publication.

The research activity of Chief Assistant Radost Petrova, PhD was performed at the Training Experimental Field of the Department of "Melioration, Land Management and Agro physics" at the Agricultural University - Plovdiv. Based on this, 53 scientific publications have been published. The joint research with colleagues from similar Institutes (Agricultural Institute - Stara Zagora, Institute of Plant Genetic Resources - Sadovo) and Universities (University of Forestry – Sofia, Trakia University - Stara Zagora) are the significance of the complexity of the research, in addition to teamwork skills. The results of these studies were published in 8 scientific articles.

The main area of both, research and publication activity of Chief Assistant Radost Petrova, PhD is irrigating a wide range of crops, including beans (garden and field), sunflower, soybeans, corn, grass mixtures, greenhouse tomatoes, celery. Important characteristics were studied, such as productivity in conditions of periodic water deficit, parameters of the "additional yield - irrigation norm", "yield - evapotranspiration" relations, leaf area formation, photosynthetic potential, correlations between the structural elements of yield under different irrigation regimes.

Factors such as irrigation methods, irrigation regime, meteorological conditions were studied, and finally an economic assessment of irrigation depending on the irrigation regime was done. The monograph is a source of valuable information for agricultural specialists, students of agronomic faculties, as well as for farmers interested in irrigation. In addition, the FAO formula for indirect determination of evapotranspiration in agricultural crops was adapted to the country's conditions. The method proposed is not inferior in accuracy, it is more economical and easier to apply also.

The results of the candidate's research activity are summarized in 49 contributions, of which 22 are scientific, 26 are applied and 1 is confirmatory. They are distributed by crops as follows: beans, sunflower, corn, soybeans, grass mixtures, other crops (greenhouse tomatoes, celery). I accept the author's reference for the contributions.

Citation and referencing of scientific production.

For participation in the competition Chief Assistant Radost Petrova, PhD presents 20 citations, of which 7 issues in scientific journals, referenced and indexed in world-famous databases; 7 issues in non-refereed journals with scientific review (foreign

editions) and 6 issues in non-refereed journals with scientific review (BG editions). The recognizability of the candidate from both, the teaching and scientific community is visible from them.

Participation in research projects.

Chief Assistant Radost Petrova, PhD participates in two competitively funded projects at the Agricultural University - Plovdiv with the object of study garden beans (period 2010-2015). The biography also indicates a field experiment with medium-early tomatoes, in order to determine the productivity and their evapotranspiration - personal financing. The candidate's participation in a research team in another scientific organization is impressive. For 4 years (2017-2020) Chief Assistant Radost Petrova, PhD is a participant in a project funded by the Agricultural Academy. In this regard, due to the project (ID P164) belongs to the coordination program of the Institute of Forage Crops - Pleven, I allow myself to note the positive opinion that the leaders expressed about the work of Chief Assistant Radost Petrova, PhD in reporting the project activity. I am referring to depth and precision in performing the experiments.

5. Remarks and recommendations.

I have any remarks.

6. Conclusion.

Based on the analysis of the pedagogical, scientific and scientific-applied activity of the candidate, I consider that Chief Assistant Radost Petrova Petrova, PhD meets the requirements of Law on the Development of the Academic Staff in the Republic of Bulgaria, Regulations for Application of the Law for the Development of the Academic Staff in the Republic of Bulgaria and the Regulations of the Agricultural University for its application. The production with which the candidate participates in the competition significantly exceeds the minimum national requirements for scientific and teaching activities for the academic position of "Associate Professor". Chief Assistant Radost Petrova Petrova, PhD has a profile of an advanced teacher and researcher, with significant achievements in her field.

All this gives me reason to evaluate **POSITIVELY** the overall activity of Chief Assistant Radost Petrova Petrova, PhD.

I allow myself to suggest to the esteemed Scientific Jury also to vote positively, and the Faculty Council of the Faculty "Viticulture – Horticulture" at the Agricultural University-Plovdiv to elect Chief Assistant Radost Petrova Petrova, PhD, for "Associate Professor" in the Scientific Speciality "Melioration".

Dated: February, 22, 2021

Town of Plovdiv

Statement prepared by:

/ Prof. Viliana Vasileva, PhD/