

STATEMENT REVIEW

by Ivelin Aldinov Mollov, PhD - Associate Professor
Plovdiv University “Paisii Hilendarski,”
Faculty of Biology, Department of Ecology and Environmental Conservation,

on the materials submitted for participation in the competition
for the academic position of “Associate Professor”
at Plovdiv University “Paisii Hilendarski”
in the field of higher education: 4. Natural Sciences, Mathematics, and Informatics
professional field: 4.3. Biological Sciences
(Ecology and Ecosystems Conservation)

In the competition for the position of “Associate Professor,” announced in the State Gazette, issue 32 of April 9, 2024, and on the website of Plovdiv University “Paisii Hilendarski” for the needs of the Department of Ecology and Environmental Conservation at the Faculty of Biology of Plovdiv University “Paisii Hilendarski,” the candidates are Chief Assistant Professor Dr. Vesela Slavcheva Yancheva and Chief Assistant Professor Dr. Slaveya Tencheva Petrova from the Department of Ecology and Environmental Protection at the Faculty of Biology of Plovdiv University “Paisii Hilendarski.”

1. General overview of the procedure and candidates

By order No. RD-21-1416 of July 8, 2024, issued by the Rector of Plovdiv University “Paisii Hilendarski”, I was appointed as a member of the scientific jury for the competition for the academic position of “Associate Professor” at the same university in the field of higher education 4. Natural Sciences, Mathematics, and Informatics, professional field 4.3. Biological Sciences (Ecology and Ecosystems Conservation), announced for the needs of the Department of Ecology and Environmental Conservation at the Faculty of Biology of Plovdiv University “Paisii Hilendarski.”

The following candidates have submitted their documents for participation in the announced competition:

Chief Assistant Professor Dr. Vesela Slavcheva Yancheva from the Department of Ecology and Environmental Conservation at the Faculty of Biology of Plovdiv University “Paisii Hilendarski”,

Chief Assistant Professor Dr. Slaveya Tencheva Petrova from the Department of Ecology and Environmental Conservation at the Faculty of Biology of Plovdiv University “Paisii Hilendarski.”

The set of materials submitted by both candidates in hard copy complies with the Regulations for the Development of the Academic Staff of the University of Plovdiv and includes the following documents:

1. Application form addressed to the Rector for admission to the competition;
2. Curriculum vitae in European format;
3. Diploma for higher education with a Master’s degree, along with the transcript;
4. Diploma for the educational and scientific degree “Doctor” (PhD);
5. List of scientific works;
6. Scientific works (copies of the publications);
7. List of citations;
8. Statement of compliance with the minimum national and additional faculty requirements;
9. Summaries of the materials under Art. 65 of the PU Academic Staff Development Regulations (in Bulgarian and a foreign language) with an extended habilitation reference if a monograph is not presented;
10. Self-assessment of contributions;
11. Declaration of originality and authenticity of the attached documents;

12. Certificate of work experience;
13. Documents related to teaching work;
14. Documents related to research work;
15. Documents according to the additional requirements of the respective faculty;
16. Other documents;
17. A complete set of documents in hard copy from items 1 to 17 – 2 copies;
18. A set of documents from items 1, 2, 6, 8, 9, 10 (possibly specifying other documents from items 4, 5, 13, 14, and 15) on an electronic medium – 2 copies.

The candidate Chief Assistant Professor Dr. Vesela Slavcheva Yancheva has submitted a total of 73 scientific publications, 2 textbooks, 2 teaching aids, and 4 research projects. The candidate has participated in 51 scientific conferences in Bulgaria and abroad. A total of 66 scientific works are accepted for review, which are outside her dissertation and will be considered in the final evaluation, along with 3 teaching aids and 4 research projects. Two scientific works related to the dissertation, 4 articles used in the competition for “Chief Assistant Professor” (information not provided by Dr. Yancheva and was additionally requested by the Chairman of the Scientific Jury, Prof. V. Gochev, from the Department of Academic Staff Development at the University of Plovdiv), one scientific article with Chief Assistant Professor Dr. Slaveya Tencheva Petrova as the lead author due to a high percentage of similarity (see further in the text), and one textbook (No. 4 on the list of textbooks), which does not meet the requirements for a book/textbook and was published in the journal “ZooNotes,” are not accepted for review.

Chief Assistant Professor Dr. V. Yancheva did not provide a list of her publications used in the competition for the academic position of “Chief Assistant Professor.” After the additionally requested information, it became clear that 4 of the articles listed under criterion B.4. were already used in the competition for the position of “Chief Assistant Professor” (2 of them do not carry points, while the other two contribute a total of 27 points, which are deducted from the total score under this indicator). Additionally, publication No. 10 on the list is marked with the wrong quartile (it is not Q2 as stated by the candidate, but Q3 and therefore only carries 15 points). For this reason, a total of 32 points are deducted from criterion B. I personally attribute this oversight on Dr. Yancheva’s part to inattentiveness, technical error, and incorrect allocation of the articles she presents in the competition across the various criteria in professional field 4.3., considering the high number of articles she submits for the competition and the significantly exceeded total points under criterion G (530 points).

The candidate Chief Assistant Professor Dr. Slaveya Tencheva Petrova has submitted a total of 43 scientific works, 2 monographs, 1 book, 3 book chapters, 4 textbooks, 9 teaching aids, and 19 research projects. The candidate has participated in 71 scientific conferences in Bulgaria and abroad. A total of 31 scientific works that are outside her dissertation, 1 book, 3 textbooks, 8 teaching aids, and 4 research projects are accepted for review and will be considered in the final evaluation. I do not accept for review 3 scientific publications related to the dissertation and 6 scientific publications used in a previous competition for the academic position of “Chief Assistant Professor.” The three book chapters (No. G.8.1, G.8.2, and G.8.3.) are also not reviewed since the first chapter (No. G.8.1) showed a very high percentage of similarity (44.92%), and the other two (G.8.2 and G.8.3) do not meet the criteria outlined in the law. According to the Law on the Development of Academic Staff in the Republic of Bulgaria, a “book chapter” is a distinct subdivision of the main text of a scientific work with a scientific editor and/or reviewers, addressing a separate issue or question related to the overall theme defined by its title or numbered section, published in a non-periodic scientific publication with an ISSN or ISBN. The submitted publications are published in a collection of articles in the periodical “ZooNotes” and, by the law, do not qualify as “book chapters.”

Additionally, three publications, numbered in the list as G.7.22, G.7.23, and G.7.26, are not reviewed due to a similarity rate above 20% (G.7.22 - 25.17%, G.7.23 - 31.38%, G.7.26 - 34.61%), all published in the journal “Ecologia Balkanica.” Since Chief Assistant Professor Dr. V. Yancheva is a co-author of article G.7.26, it will also not be considered when calculating her points.

The two presented monographs under indicator G.5, evaluated by content and definition according to the Law on the Development of Academic Staff in the Republic of Bulgaria, do not fully meet the requirements of the law, in my opinion. According to the law, a “monograph” is considered a published scientific work containing a comprehensive and thorough investigation of a specific subject, problem, or person, written by one or several authors sharing the same perspective. A monograph is a scientific work that does not merely repeat or summarize existing knowledge, has a scientific editor and/or reviewers, possesses an ISBN, and consists of at least 100 standard pages with 1800 characters per page. It must include an extended content section, a comprehensive bibliography, and citations of other scientific works throughout the text.

The first presented monograph (“The Green System of the City of Plovdiv – Ecological Aspects of Development and Adaptation in Some Tree Species”) is more of a summary of already published data and does not fully meet the legal requirements. The second monograph (“Paleo-ecological Reconstruction of Perunika Village Region (Bulgaria): Molluscs (Mollusca: Gastropoda, Bivalvia) as Indicators for the Paleoenvironment”) has 80 pages, which is below the legally required minimum, and practically contains information already published by the author. Furthermore, the complete text is missing from the set of submitted materials.

The textbook “Biological Farming and Agro-biodiversity” is not reviewed because it falls within the field of higher education “6. Agricultural Sciences and Veterinary Medicine” and is not related to the competition’s theme, nor is the teaching aid “Advanced Technologies for Processing and Analysis of Large Data,” which is also outside the competition’s scope. Of the research projects, I review only Project No. BG-RRP-2.004-0001-C01, Project No. KP-06-OPR 03/12, Project No. KP 06 N65/13, and Project No. BG161PO003-1.2.02-0042-C0001, which is listed in the candidate’s performance table twice with different tasks, but since it is the same project, it is counted only once.

Projects No. KP-06 N76/11; “Selection, Agronomy, and Seed Production of Cultivated Plants”; “Preparation of an Analysis of the Impact of Agriculture on the Environment and Climate Change”; “Development of Intercropping Systems with Camelina to Improve Yield and Quality Parameters of Local Underutilized Crops (SCOOP)”; “Circularity in Mixed Crop and Livestock Farming Systems with Emphasis on Climate Change Mitigation and Adaptation”; “Stacking of Ecosystem Services: Mechanisms and Interactions for Optimal Crop Protection, Pollination Enhancement, and Productivity – EcoStack”; as well as the National Scientific Program “Intelligent Crop Production” under the Ministry of Education and Science, all belong to the field of higher education “6. Agricultural Sciences and Veterinary Medicine” and are not related to the competition’s theme. Projects No. BG05M2OP001-2.011-0001 (listed twice); VMR 1/1.1/2145/2017; “Integrating Paleontology into Bulgarian Classrooms: An Inquiry-Based STEM Workshop for Teachers of Grades 2-8, and Development of Resources”; and “The Fabric of Tesserae – What Makes the Mosaics” fall outside the competition’s scope, as they pertain to the professional field “1.3. Methodology of Education in...”. No evidence has been provided for contract No. 00740-L0107-020.118 related to NATURA 2000.

In conclusion, I can state that both candidates are long-time lecturers in the department and certainly possess the necessary qualifications for the academic position of "Associate Professor." The materials they have submitted for the competition far exceed the minimum national requirements according to the Law on the Development of Academic Staff in the Republic of Bulgaria, as well as the internal regulations of the Faculty of Biology at Plovdiv University “Paisii Hilendarski.”

2. General characteristics of the candidates' activities

General characteristics of the teaching and scientific activity of Ch. Assistant Dr. Vesela Yancheva

Assistant Professor Dr. Vesela Yancheva teaches lectures and practical sessions in four compulsory courses at the undergraduate level: "Aquaculture," "Ecological Toxicology," "Water Pollution," and "Climatology and Hydrology" in two programs at the Faculty of Biology at Plovdiv University, as well as in one program at the Faculty of Philosophy and History. She also teaches the

course "Water Resource Management" at the Master's level and is responsible for seven elective courses in both educational degrees. Furthermore, she has developed a new elective course titled "Methodological Guidelines for Thesis Development." For the 2023/2024 academic year, she has 690 hours of auditorium teaching at the undergraduate level alone and teaches three compulsory courses at the branch in the town of Kardzhali.

Dr. V. Yancheva is the co-author of three study aids, including two textbooks, and has successfully graduated five graduate students (according to the attached list). He actively participates in the organizing committees of scientific conferences and various committees in the work of the Faculty of Biology, including the committees on accreditation, international activity, selection of students and ethical treatment of experimental animals. She is also the Erasmus+ coordinator of the Faculty of Biology from 2020. Ch. Associate Professor V. Yancheva is the lead author in 44% of her publications, has a Scopus citation index (H-index) of 12 and participates in 15 projects, leading and coordinating four of them, mainly in the field of aquatic toxicology.

The applicant's publications can be classified as follows (the analysis excludes publications no. 3,4,7,9 and 55 from the list, for the reasons mentioned above):

- by type: scientific articles – 64 items; reports – 4 items;
- by importance - articles in publications with an impact factor - 28 items; publications with SJR – 41 items), by place of publication (articles in refereed international journals – 24 items, articles in national journals – 40 items; reports in proceedings of national scientific conferences, sessions and seminars – 4 items.

Regarding the citations Ch. Associate Professor Yancheva presents 323 citations in Scopus and WoS databases, which have a total of 646 points. The candidate submitted another 61 citations in other databases, which, however, did not carry any points and were excluded from the analysis.

General characteristics of the teaching and scientific activity of Ch. Assistant Dr. Slaveya Petrova

Ch. Assist. Professor Slaveya Petrova teaches lectures and exercises on four compulsory disciplines in the bachelor's degree: "Fundamentals of Paleontology", "Geology and Petrography", "Soil Science and Soil Pollution", and "Ecology and Protection of the Natural Environment" in four majors at the Faculty of Biology of the University of Plovdiv, as well as leads the discipline "Geomorphology and Soil Science" at the Faculty of Philosophy and History. She is also responsible for optional subjects and one optional one. Leads 3 disciplines in master's programs in the Faculty of Arts of the University of Plovdiv. During the academic year 2023/2024, she has 1006 hours of classroom employment (in fact, her academic workload for the last 4 years is well over 1000 academic hours) and she leads classes in both branches of the university in Kardzhali (10 disciplines) and Smolyan (3 disciplines). Separately, the colleague works on a second employment contract at the Agricultural University - Plovdiv. My personal opinion is that such a study load is too much for one person working in two places.

Dr. S. Petrova supervised 22 diploma theses in the bachelor's degree and 14 in the master's degree. She has participated in 71 international and national scientific forums and is an active member of various committees, including the Accreditation Committee and the Quality Committee. She is the lead author in 50% of her publications and has a citation index (H-index) in Scopus - 8. Her contributions in the scientific field are related to the topic of her dissertation work, with part of the results obtained under the guidance of the late prof. Yurukova. Her main contributions are in the field of ecology of natural ecosystems, air and soil pollution, as well as not a small part are outside the field of the competition, as they fall into the field of higher education "6. Agricultural Sciences and Veterinary Medicine" and are in the field of agriculture, including experiments with various agricultural crops such as tobacco, sorghum and tomatoes.

The candidate's publications can be classified as follows (the three book chapters (No. G.8.1., G.8.2. and G.8.3.) and publications № G7.22, G.7.23 and G.7.26 are excluded from the analysis and 55 from the list, for the reasons mentioned above):

- by type: articles – 31 items; reports – 0 items;

- by importance - articles in publications with an impact factor - 20 items; publications with SJR - 31 items), by place of publication (articles in refereed international journals - 15 items, articles in national journals - 16 items. The large number of articles published in the journal "Ecologia Balkanica" - 11 items (plus the three, which I excluded from the analysis for the reasons listed above - a total of 14 items), where the candidate works as a technical editor.

Regarding the citations Ch. Assist. Professor Petrova presents 265 citations in Scopus and WoS databases, which bring a total of 530 points. However, 9 of the citations in the attached list are either duplicates (III.5 - duplicates III.4; XXI.7 - duplicates XXI.6) or are not found in the Scopus and WoS databases (I.10.; IX.3; IX.7; IX.9; XVII.7; XXIII.18; XXIV.2), for this I remove 18 points.

After these adjustments, the coverage of the minimum scientometric requirements by both candidates looks like this:

Group of criteria	Minimal points needed	Execution Dr. V. Yancheva	Execution Dr. S. Petrova
A	50	50	50
V	100	85	120
G	200	530	417
D	50	646	512
E	-	98,66	136
Total	400	1409,66	1235

Both candidates meet the minimum specific requirements of the Faculty of Biology at University of Plovdiv "Paisii Hilendarski".

The total number of points (as well as the total number of articles and the Scopus H-index) of Ch. Assistant Professor Vesela Yancheva is significantly larger than that of Ch. Assistant Professor Slaveya Petrova, and despite the oversight on her part regarding the articles used in the competition for the academic position "chief assistant" and the incorrect distribution of the articles presented in the competition (between criteria B and G), I believe that she has more qualities, opportunities and authority for occupation of the academic position "associate professor".

3. Critical remarks and recommendations

Ch. Assistant Professor Vesela Yancheva, Ph.D., has a very well-formed and clearly expressed research profile in the field of aquatic ecotoxicology. It determines both her academic and scientific-applied activities in the department. It makes a strong impression that Dr. Yancheva continues to develop in the field of aquatic toxicology, participating in numerous trainings under the "Erasmus+" program and international collaborations with leading researchers in the field from Europe. She is a respected scientist in the scientific field in Europe and the world, which is evident both from her many participations in scientific forums in Bulgaria and abroad, where she promotes the results of her work, but also from the many citations of her scientific works that she receives every year. This is an undoubted testament to her weight as a world-class scientist in the field of environmental toxicology. She is a respected and loved teacher by the students she teaches.

I can recommend Ch. Assistant Professor Vesela Yancheva to pay more attention and diligence in the preparation of documentation and scientific works when participating in competitions for filling academic positions in the future.

Ch. Assistant Professor S. Petrova lacks a clearly defined research direction. Her wandering from topic to topic in her scientific work over the years - air pollution, paleoecology and paleontology, soil science and soil pollution, agricultural sciences, waste management, and recently ecosystem services and sustainable development - makes an unpleasant impression. This is reflected even in the projects she has participated in and the teaching aids she has published over the years. It also makes a very unpleasant impression that a high percentage of similarity was found in several of her scientific works. Over the years, I have also registered this in the diploma theses of some of the

defense graduates supervised by her, which shows a model of work. The high number of submitted publications (more than 45% of those listed) that were published in the journal "Ecologia Balkanica", where she participates as a technical editor and prepares the PDFs of the published articles, also makes a bad impression.

I recommend the candidate publication activity in more journals outside Bulgaria and outside the publishing house of MDPI.

Conclusion

The documents and materials presented by the two candidates **meet** the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria, the Regulations for the Implementation of the law and the relevant Regulations of PU "Paisii Hilendarski".

Both candidates in the competition have submitted a sufficient number of scientific papers published after the materials used in the defense of the degree "Doctor" (PhD) and the academic position "Chief Assistant" (with the exception of Ch. Assist. Prof. Yancheva, where a list of the publications already used for academic position "chief assistant", and the remaining articles are unevenly distributed between criteria B and D, which led to the number of points under criterion B to drop below the minimum number required by law). In the works of both candidates there are original scientific and applied contributions that have received international recognition as a representative part of them have been published in journals and scientific collections issued by international academic publishing houses. Their theoretical developments have practical applicability, and some of them are directly oriented to academic work. The scientific and teaching qualifications of both are **unquestionable**.

The results achieved by both candidates in the educational and scientific research activities correspond to the minimum national and additional requirements of the Faculty of Biology, adopted in connection with the Rules of the PU for the application of the Law on the Development of the Academic Staff in the Republic of Bulgaria.

After getting acquainted with the materials and scientific works presented in the competition, analyzing their significance and the scientific, scientific-applied and applied contributions contained in them, I find it reasonable to give my **positive assessment** and to recommend the Scientific Jury to prepare a report-proposal to the Faculty Council of the Faculty of Biology at Plovdiv University "Paisiy Hilendarski" for the election of Chief Assistant Professor Vesela Slavcheva Yancheva, PhD at the academic position of "associated professor" at the University of Plovdiv "Paisii Hilendarski" in: field of higher education 4. Natural sciences, mathematics and informatics, professional field: 4.3. Biological Sciences (Ecology and Ecosystem Conservation).

05.09.2024.

Reviewer:

(Assoc. Prof. Ivelin Mollov, PhD)