



OPINION

by Prof. Dsc Yana Ilieva Topalova,

Researcher R4 in the Faculty of Biology of the SU "St. Kliment Ohridski"

of the materials submitted for participation in a competition for filling the academic position

Associate Professor at Paisii Hilendarski University of Plovdiv

by: field of higher education 4. Natural sciences, mathematics and informatics

professional direction 4.3 Biological sciences (Ecology and ecosystem protection)1. **Общо представяне на получените материали**

By order No. PD-21-1416 dated 07/08/2024 of the Rector of Plovdiv University "Paisiy Hilendarski" (PU), I have been appointed as a member of the scientific jury of a competition for the academic position of "associate professor" in the PU in the field of higher education 4. Natural sciences, mathematics and informatics, professional direction 4.3 Biological sciences (Ecology and protection of ecosystems), announced in the State Gazette, No. 32 of 09.07.2024 and on the PU website, for the needs of the Department of Ecology and environmental protection" to the Faculty of Biology. The following candidates, listed in the order of submission, submitted their applications: Dr. Vesela Slavcheva and Dr. Slaveya Tencheva.

My opinion will follow the order: 1/ Consecutive presentation of the two candidates; 2/ Comparative analysis of the works and merits of the two candidates; 3/ Conclusion

A. Analysis of the documentation of the Chief Assistant. Dr. Vesela Yancheva

The presented materials are in accordance with the Regulations for the Development of the Academic Staff of the PU (RASPU). Some of the documents with a personal declaration of will are not signed (application, CV, list of scientific works, habilitation reference, etc.).

2. Brief biographical data

General Assistant Dr. V. Yancheva obtained a bachelor's degree in "Plant Protection" at the Agricultural University, Plovdiv. She obtained a master's degree in ecology from the Norwegian University of

Natural Sciences and a doctorate in ecology and ecosystem protection from the Norwegian University of Science and Technology. Since 2014, he holds the academic position of "Chief assistant" in the department of "Ecology and Environmental Protection" at the Faculty of Biology (BF) of the PU.

3. Evaluation of the research activity of the Assistant Professor Dr. V. Yancheva

Indicator 4 - Habilitation work - scientific publications in publications that are referenced and indexed in world-renowned databases with scientific information (Web of Science and Scopus)

To implement this indicator, head of Dr. V. Yancheva presented 12 nos. publications, of which only 7 nos. (from C.4.6 to C.4.12), meet the requirement of the LDASRB, that only publications referenced and indexed in the Scopus and Web of Science databases participate in this indicator, which is why I consider that publications from C.4.1 to C. 4.5 do not meet the requirements. They are not even scored. According to the documents of Chief Assistant Dr. V. Yancheva 3 pcs. articles were published with journals with Q2 (B.4.8, B.4.10, B.4.12), 3 nos. articles were published in journals with Q3 (B.4.6, B.4.7, B.4.11) and 1 no. was published in a journal with Q4 (B.4.9), which has a total of 117 items. The publications are dedicated to the study of the ecotoxicological effects (histopathological and biochemical) of toxicants, such as heavy metals and pesticides, on different types of fish - carp, perch and red feather and correspond to the theme of the competition. A check at www.scimagojr.com shows that in 2015 the journal Archives of Biological Sciences had quartile Q3, not Q2, therefore publication B.4.10 of 2015 in Archives of Biological Sciences should be scored with 15 items, not with 20 items. According to RASPU, "The materials from item 3 and item 4 must not repeat others with which the candidate participated in successful procedures for acquiring the OHC "Doctor" and the NS "Doctor of sciences" and for holding the academic position of 'principal assistant'. Doctor V. Yancheva presented 2 articles in a competition for the academic position of "principal assistant" held in 2014. The information is documented and received by the chairman of the scientific jury. From the provided reference and the list of publications used to occupy the position of "principal assistant", personally signed by Dr. V. Yancheva, publications C.4.7 and C.4.9 have already been used by the candidate to acquire the academic position of "principal assistant", therefore, I deduct them and 27 points from the candidate's total points, according to indicator B. After the adjustments made, the total sum of points of the chief as. Dr. V. Yancheva according to indicator B is 85 points, which does not meet the threshold value of the criterion of 100 points, determined by LDASRB.

Indicators G- /from 5 to 10/

Indicator 7 - Scientific publications in publications that are referenced and indexed in the global scientific information databases Scopus and Web of Science

To fulfill this indicator, Chief Assistant Dr. V. Yancheva presented 59 nos. publications, out of which only 38 items meet the requirement of LDASRB, in this indicator only publications referenced and indexed in the Scopus and Web of Science databases, therefore I exclude 21 items. publications outside the specified databases (G.7.1-G.7.4, G.7.11, G.7.20, G.7.21, G.7.33-G.7.35, G.7.38-G.7.40, G.7.43, G.7.39 , D.7.40, D.7.43, D.7.46, D.7.46, D.7.47, D.7.51-D.7.54 and D.7.56). These posts are not scored. Of the mentioned publications, 3 nos. are in magazines with Q1, 4 nos. are in magazines with Q2, 5 nos. are in journals with Q3 and 26 are in journals with 4. The total number of points that these publications generate is 542 items. The candidate is the lead author of 16 items. of the 38 publications. All publications of Chief Assistant Dr. V. Yancheva are the focus of the announced competition. More precisely, research is concentrated on the ecotoxicological effect of various toxic pollutants - heavy metals and pesticides. Water bioindicators (fish and zebra mussel) are used to assess their impact. Main contribution to the publications of the Chief Assistant. Dr. V. Yancheva outlines the application of a multi-biomarker approach with an emphasis on histological and biochemical indicators for the purposes of integrated ecomonitoring. The contributions to the publications of the Chief Assistant I rate Dr. V. Yancheva as scientifically applied and significant for ecotoxicological and hydrobiological science.

Group of indicators D (Sum of points in indicator 11)

Indicator 11 - Citations in scientific publications, monographs, collective volumes and patents, referenced and indexed in world-renowned databases of scientific information (Web of Science and Scopus)

To fulfill this indicator, Chief Assistant Dr. V. Yancheva presented 323 pcs. citations in the world databases (Web of Science and Scopus), which, according to the Regulations for the Implementation of the LDASRB and RASPU, have 646 items.

Group of indicators E (Sum of indicators from 12 to the end)

Indicator 14 - Participation in a national scientific or educational project

Principal assistant Dr. V. Yancheva indicated participation in 2 national projects, which gives her a total of 20 points.

Indicator 15 - Participation in an international scientific or educational project

General Assistant Dr. V. Yancheva participated in an international project, which earned her 20 points.

Indicator 16 - Management of a national scientific or educational project

General Assistant Dr. V. Yancheva was the head of 1 national project, financed by the Scientific Research Institute of the Ministry of Education and Science, which brought her 20 points.

Indicator 19 - Published university textbook or textbook that is used in the school network

To fulfill this indicator, Chief Assistant Dr. V. Yancheva indicated co-authorship of 2 university

textbooks (E.19.1 and E.19.2), which bring her 26.67 points.

Indicator 20 - Published university textbook or textbook that is used in the school network

To fulfill this indicator, Chief Assistant Dr. V. Yancheva indicated co-authorship of 2 university textbooks (E.20.3 and E.20.4), which bring her 8 points.

4. Evaluation of the educational and pedagogical activity of the assistant principal. Dr. V. Yancheva (lecture courses, work with students, graduates and doctoral students)

The report on the study load of the assistant principal. Dr. V. Yancheva in BF is in unusual shape. But even from this form, it is clear that Chief Assistant. Dr. V. Yancheva had a high over-occupancy every year. The main academic disciplines that she taught are: a mandatory lecture course on "Ecological Toxicology" for "Ecology and Environmental Protection" and "Pharmaceutical Biotechnologies" majors, jointly with Prof. Dr. I. Velcheva. She independently conducted compulsory lecture courses on "Aquaculture", "Climatology and Hydrology" and "Water Pollution" for "Ecology and Environmental Protection" and "Geography, Technologies and Entrepreneurship" majors from the Bachelor's College of Economics. General Assistant Dr. V. Yancheva also leads the optional course "Methodical guidelines for the development of a diploma thesis", for all specialties from the BF of the PU. The candidate has also delivered 20 hours of lectures on the mandatory discipline "Water Resources Management" for the Master's degree program. General Assistant Dr. V. Yancheva actively participates in the work of the doctoral school Academia Iuventutis, where he leads two courses "Methodical guidelines for developing a scientific publication" and "Methodical guidelines for developing a dissertation and scientific publication. General Assistant Dr. V. Yancheva presented a list of 5 successfully graduated graduates.

5. Evaluation of the personal contribution of Ch. assistant V. Yancheva

From the presented documentation, it can be judged that the personal contribution of Dr. Yancheva is significant. All these activities fully meet the requirements for occupying the academic position "associate professor".

6. Critical remarks and recommendations

I do not personally know the Chief Assistant. V. Yancheva, but my recommendations to her, on the one hand, to be more precise when preparing documents for academic purposes. Self-assessment of scientific contributions can be more specific with reference to articles and literature. In this general form, it is not convincing enough. It would be good to attach a reference on what is the contribution in the development of the curricula of the selected study disciplines, which of them were developed, approved for the first time by the candidate.

7. Personal impressions - I have no personal impressions of the candidate.

B. Evaluation of the documentation of the Chief Assistant. S. Petrova

For participation in the competition, Chief Assistant Dr. S. Petrova has submitted a total of 49 scientific works, of which 34 scientific publications, 2 monographs, 1 book based on a defended dissertation, 3 chapters of a collective monograph and 13 nos. textbooks and teaching aids. I accept for review all submitted materials that are not part of the dissertation for the acquisition of the ESS "doctor" (3 scientific articles) and 6 scientific publications used to acquire the academic position of "principal assistant", which chief asst. Dr. S. Petrova correctly described. The candidate has attached references for participation in scientific projects, academic work and developed educational courses. In the electronic version of the documents of Chief Assistant. Dr. Slaveya Petrova lacks a monographic work **G.5.2.**

8. Brief biographical data of the Chief Assistant. Dr. S. Petrova

General Assistant Dr. S. Petrova obtained a BA "Bachelor's Degree" and a "Master's Degree" in the specialty "Ecology" at the Polytechnic University. She obtained a PhD in "Ecology and Ecosystem Protection" from the National Academy of Sciences. Since 2011, he has held the academic position of "principal assistant" in the department of "Ecology and Environmental Protection" in the BF of the PU, and since 2024, he has also held the academic position of "associate professor" in the field of higher education 4. Natural sciences, mathematics and informatics professional direction 4.3 Biological sciences (Ecology and protection of ecosystems) at the Agricultural University, Plovdiv.

9. Evaluation of the research activity of the Assistant Professor Dr. S. Petrova

Group of indicators A: Indicator 1 Dissertation work for acquiring ONS "doctor"

The candidate has a PhD in the scientific specialty "Ecology and Protection of Ecosystems", acquired at the PU.

Indicator 4 - Scientific publications in publications that are referenced and indexed in the world databases of scientific information Scopus and Web of Science, to play the role of habilitation thesis

General Assistant Dr. S. Petrova presented 5 nos. publications (from B.4.1 to B.4.5) that meet the requirements of the LDASRB, of them 4 nos. were published in journals with Q1 and 1 no. was published in a journal with Q2, which has a total of 120 items. The publications are thematically focused on the phytomonitoring of atmospheric pollution in an urban environment.

Group of indicators G (Sum of indicators from 5 to 10)

Indicator 5 - Published monograph that is not presented as the main habilitation thesis

For participation in the competition, according to this indicator, only chief assistant. Dr. S. Petrova presented 2. monographs (G.5.1 and G.5.2), which are 60 items in total.

Monograph G.5.1. "The green system of the city of Plovdiv - ecological aspects of the development and adaptation of some tree species.", University Publishing House "Paisiy Hilendarski", 202 pages, ISBN 978-619-202-968-5. is in the narrow area of expertise of S. Petrova.

In the electronic version of the documents of Chief Assistant. Dr. S. Petrova, the attached monograph is missing G.5.2. Therefore, I cannot take a position on it and recognize only 30 points.

Indicator 6 - Published book based on a defended dissertation work for the award of the educational and scientific degree "Doctor"

For participation in the competition, according to this indicator, the chief assistant Dr. S. Petrova presented 1 book (G.6.1) "Passive and active phytomonitoring of atmospheric pollution in the city of Plovdiv" University Publishing House "Paisiy Hilendarski", 236 pages, ISBN 978-619-202-619-6, of which it has 20 items.

Indicator 7 - Scientific publications in publications that are referenced and indexed in the world databases of scientific information Scopus and Web of Science.

Chief Assistant Dr. S. Petrova presented 29 numbers. publications that meet the requirements of the RSARB. Of them 1 pc. is in magazine with Q1, 6 numbers. are in magazines with Q2, 8 numbers. are in journals with Q3 and 14 are in journals with Q4, which brings 433 items. The candidate is the lead author of 13 items. of the 29 publications. All publications of Chief Assistant Dr. S. Petrova are in the field of the announced competition and are focused on her main research interest - phytomonitoring of atmospheric pollution in urban environments. Key contribution to the publications of the Chief Assoc. Dr. S. Petrova are complex studies on the condition of the main components of the urban ecosystem (soils, soil communities, green infrastructure, etc.). The contributions are mainly scientific and applied and can be grouped into three areas: Ecology of urban ecosystems, Ecology of natural ecosystems, Biological agriculture.

Indicator 8 - Published book chapter or collective monograph

General Assistant Dr. S. Petrova presented materials expressed in one section (G.8.1) from a collective monograph/book "Advances in environmental research" (Ed. Justin A. Daniels), published abroad

and two sections (G.8.2 and G.8.3) from the collective monograph/book "Fauna of Sarnena Sredna Gora Mts" (Eds. Georgiev, D., Bechev, D. & Yancheva, V.), published in Bulgaria, which contains 45 points.

Indicator 11 - Citations in scientific publications, monographs, collective volumes and patents, referenced and indexed in world-renowned databases of scientific information (Web of Science and Scopus)

To fulfill this indicator, Chief Assistant Dr. S. Petrova presented 265 numbers. citations in the world databases (Web of Science and Scopus) with a value of 530 points.

Indicator 14 - Participation in a national scientific or educational project

General Assistant Dr. S. Petrova participated in 9 national projects, from which she received 90 points.

Indicator 15 - Participation in an international scientific or educational project

According to this indicator, Chief Assistant Dr. S. Petrova indicated participation in 6 international projects - 120 points.

Indicator 16 - Management of a national scientific or educational project

General Assistant Dr. S. Petrova was the head of 3 national projects, which, according to the candidate, brings her 60 points. The report I made shows that the head assistant. Dr. S. Petrova was the head of 1 project KP 06 H65/13 "Possibilities and practical solutions for optimization of the transition from waste management to a green economy", financed by the NSF of the Ministry of Education and Culture, which earned her 20 points. Scored as two separate projects, the second and third from the list, are actually the same project BG161PO003-1.2.02-0042-C0001 "Building capacity for technology transfer in PU "Paisiy Hilendarski", in which the chief assistant. Dr. S. Petrova was a team leader performing two research tasks on the project. For this reason, I recognize the candidate only 10 points, as a participant in a national project.

Indicator 18 - Funds raised for projects managed by the applicant

General Assistant Dr. S. Petrova reports 12 items for attracted BGN 60,000 under project KP 06 H65/13 "Possibilities and practical solutions for optimization of the transition from waste management to a green economy", financed by the Scientific Research Institute of the Ministry of Education and Science.

Indicator 19 - Published university textbook or textbook that is used in the school network

To fulfill this indicator, Chief Assistant Dr. S. Petrova indicated co-authorship of 4 university textbooks (E.19.1 - E.19.4), which bring her 46.67 points.

Indicator 20 - Published university textbook or textbook that is used in the school network

To fulfill this indicator, Chief Assistant Dr. S. Petrova indicated co-authorship of 9 university textbooks (E.20.1 to E.20.9), which bring her 41.83 points.

10. Evaluation of the educational and pedagogical activity of the assistant principal. Dr. S. Petrova (lecture courses, work with students, graduates and doctoral students)

The report on the study load of the assistant principal. Dr. S. Petrova covers a 5-year period and is detailed, reflecting the large-scale, diverse and extraordinary educational activity of the candidate at the PU and its affiliates in Kardzhali and Smolyan. The main academic disciplines that were and are led by the head assistant. S. Petrova are "Ecology", "Ecology and protection of the natural environment", "Soil science and soil pollution", "Fundamentals of paleontology", "Geology and petrography", "Geomorphology", "Protection of soil resources", "Environmental legislation", "Ecological Management", "Soil Science and Conservation of Soil Resources" and "Restoration of Natural Ecosystems" in Branch "L. Karavelov" in Kardzhali. "General Ecology" and "Fundamentals of Paleontology" at the Branch in Smolyan. General Assistant Dr. S. Petrova has attached a reference for a large number of newly developed and updated study disciplines of them - 9 compulsory, 12 optional and 3 optional. General Assistant Dr. S. Petrova presented a list of 36 successfully graduated graduates.

11. Personal contribution of the Chief Assistant. S. Petrova

The place of chief assistant Petrova in the publications, references and materials provided, and the partner qualities of the candidate give a sign and reason to believe that her personal participation is significant. I personally believe that at today's level of biological sciences, participation in strong, working teams and the ability for loyal scientific partnership is a guarantee of high-level scientific research. At the university level, it is even more valuable that the developed scientific novelties are accessible and disseminated among students. For the latter, I can judge from the attached list of 36 graduates who successfully defended their diplomas, with whom the chief assistant worked. Petrova.

12. Critical notes and personal impressions

My critical notes to Chief Ass. S. Petrova, in the self-assessment of the contributions, it is good to have specific scientific articles that support a specific contribution. I know S. Petrova personally. From our brief

meetings, I was left with the impression of a highly motivated, knowledgeable and capable person who breaks boundaries and overcomes barriers. I wish that in the future he will keep his innovative spirit and his human energy. I am convinced that he will be a valuable member of teaching and research teams in the future as well.

13. Comparative analysis of the results presented by the two candidates

The education and career development of the two candidates is entirely within the scope of the announced competition. Both candidates have a PhD in the scientific specialty "Ecology and Ecosystem Protection", acquired at the PU. Both candidates have large-scale and diverse research and educational activities. They have gained experience and good educational practices in delivering lecture and practical study subjects. Both candidates are socially active individuals, they participate very actively in the various educational activities of the PU. However, when it comes to criteria that have numerical dimensions, the comparison can become much more objective and accurate.

The comparative numerical analysis of the collected points from the indicators of the LDASRB and the Ordinance for its application in the field of the competition is made below in the table, which accurately reflects what was said above about the research and educational achievements of the two candidates.

Table 1. Fulfillment of the minimum national requirements for occupying the academic position "docent" by scientific field 4. Natural sciences, mathematics and informatics, professional direction 4.3. Biological sciences from the two candidates for participation in the competition

Group of indicators	Indicators	Number points	Results of Dr. V. Yancheva	Results of Dr. S. Petrova
A	1. Dissertation work for the award of the educational and scientific degree "Doctor"	50	50 Responds	50 Responds
B	4. Habilitation work - scientific publications in publications that are referenced and indexed in world-famous databases with scientific information (Web of Science and Scopus)	100	85 NOT Responsible	120 Responds
G	Sum of indicators from 5 to 10	200	542 Responds	528 Responds
	5. A published monograph that is not presented as a major thesis			30
	6. Published book based on a protected dissertation work for awarding the educational and scientific degree "doctor"			20
	7. Scientific publication in publications that are referenced and indexed in world-famous databases with scientific information (Web of		542	433

	Science and Scopus), outside of the habilitation thesis			
	8. Published book chapter or collective monograph			45
D	11. Citations in scientific publications, monographs, collective volumes and patents, referenced and indexed in world-famous databases with scientific information (Web of Science and Scopus)	50	646 Responds	530 Responds
E	Sum of the indicators from 12 to the end	-	90.67	320.5
E	14. Participation in a national scientific or educational project		20	120
	15. Participation in an international scientific or educational project		20	120
	16. Management of a national scientific or educational project		20	20
	18. Attracted funds for projects managed by the applicant			12
	19. Published university textbook or textbook that is used in the school network		26.67	46.67
	20. Published university textbook or textbook that is used on the school network		8	41.83
	SUM of points	400	- Not responsible for habilitation labor	1588.5 Responds

Table 2. Fulfillment of the additional requirements of the BF for occupying the academic position "associate professor" in scientific field 4. Natural sciences, mathematics and informatics, professional direction 4.3. Biological sciences from the two candidates for participation in the competition

Requirements	Results of Dr. V. Yancheva	Results of Dr. S. Petrova
1. The candidate must be the author or co-author of at least 2 (two) study aids in the relevant field and specialty of the announced competition	3 no Responds	13 no Responds
2. The candidate must have supervised at least 5 (five) successfully defended graduates in the relevant field of the competition	5 no Responds	36 no Responds
3. The candidate must submit a document for at least 5 (five) years of teaching experience;	9 years. 7 months Responds	13 years 3 months Responds.
4. The candidate must have participated in at least 2 (two) scientific projects	15 Responds	above 30 Responds
5. The candidate must have administrative experience (for the last 5 years) in at least one of the activities listed below: <ul style="list-style-type: none"> Participation in preparation and accreditation procedures; 	Yes Responds	Yes Responds

<ul style="list-style-type: none"> • Participation in training quality assurance activities; • Participation in the preparation of a candidate student campaign; • Participation in administrative activities, such as certification committee, ethics committee, etc.; 		
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14. CONCLUSION

THE ANALYSIS MADE OF THE PRESENTED BY THE CHIEF ASSISTANT DR. VESELA SLAVCHEVA YANCHEVA AND CHIEF ASSISTANT DR. SLAVEYA TENCHEVA PETROVA IN THE CONTEST MATERIALS, SCIENTIFIC WORKS, THE CONTRIBUTIONS GIVE ME THE REASON TO MAKE A RANKING OF THE TWO PARTICIPANTS IN THE CONTEST. IN THE FIRST PLACE, I RANK CHIEF ASSISTANT. SLAVEYA TENCHEVA PETROVA, PH.D., TO THE SECOND CHIEF ASSISTANT PH.D. VESELA SLAVCHEVA YANCHEVA, DUE TO NON-FULFILLMENT OF THE MINIMUM SCIENTOMETRIC REQUIREMENTS UNDER INDICATOR B.

ON THE BASIS OF THIS RANKING, I RECOMMEND THAT THE SCIENTIFIC JURY PREPARE A REPORT-PROPOSAL TO THE FACULTY COUNCIL OF THE FACULTY OF BIOLOGY FOR THE ELECTION OF THE CHIEF ASSISTANT PROFESSOR. DR. SLAVEYA TENCHEVA PETROVA TO THE ACADEMIC POSITION OF "ASSOCIATE PROFESSOR" AT PU "PAISIY HILENDARSKI" IN: FIELD OF HIGHER EDUCATION 4. NATURAL SCIENCES, MATHEMATICS AND INFORMATICS PROFESSIONAL DIRECTION 4.3 BIOLOGICAL SCIENCES (ECOLOGY AND PROTECTION OF ECOSYSTEMS).

7.09. 2024

Prepared the opinion:

(Prof. Dsc. Yana Topalova)