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OPINION

By Dr. **Zhelyazka Dimitrova Raykova** - Professor at Plovdiv University

"Paisii of Hilendarski"

Of the materials submitted for participation in the competition

To hold the academic position of **'associate professor'**

At the Pedagogical Faculty of the Trakia University, Stara Zagora

By field of higher education 1. Pedagogical sciences

Professional direction 1.3 Pedagogy of training in...

Scientific specialty "Pedagogy of natural science education"

In the competition for 'docent', announced in the State Gazette, *no. 41 of 03.06.2022*

Dr. Margarita Slavova Peneva, assistant in the same Department, participated as a candidate
for the needs of the DIPCU.

1. General presentation of the procedure and the candidate

By order No. P1918/17.06.2022 of the Rector of the Trakia University, Stara Zagora, I have been appointed as a member of the Scientific Jury of the competition for the academic position of **"associate professor" at the Trakia University** in the field of Higher education 1. Pedagogical Sciences, Professional direction 1.3. Pedagogy of learning in... (Pedagogy of learning in natural sciences), **announced for the needs of the DIPKU at the University**.

Only one candidate has submitted documents for participation in the announced competition: **Dr. Margarita Slavova Peneva** from DIPKU, Trakia University, Stara Zagora.

The paper set of materials presented by Dr. Peneva is in accordance with the Regulations for the Development of the Academic Staff of the Thrace University, and includes all the necessary documents.

Candidate Dr. Margarita Peneva has submitted a total of **16** scientific works, a monograph, **1** book, **2** electronic textbooks and teaching aids for teacher qualification, which are used in the Moodle platform. The total number of research papers is **26** (I do not consider **4** from **30** presented, which are popular articles). The distribution of scientific works by relevant headings, in the country and abroad, is as follows: in Bulgarian **22**, in foreign languages **4**, as a sole author - **10**. **Two** articles are in indexed editions. There are **16** publications related to the teaching methodology of Man and nature and natural sciences, **10** of which refer to problems of the qualification of pedagogical specialists. Documents (in the form of official notes) for participation in projects and developed and curricula applied in practice (**8** nos.).

The documents submitted for consideration are in electronic format, in neat technical form and well organized. According to quantitative criteria, type and nature of the scientific production, Dr. Peneva meets the profile of the competition and meets the minimum national requirements for holding the academic position of "Associate Professor". Her scientific interests are in the field for which the competition was announced - the teaching methodology in natural sciences.

Dr. Margarita Peneva, assistant professor, completed her master's degree at the Sofia University "St. Kliment Ohridski", specialty "Biology and Chemistry" and a doctorate in pedagogical sciences at the Technical University - Sofia, branch - Sliven in 2018. Her dissertation is on contemporary aspects of mentoring as a form of teacher qualification and continuing education. From 2008 until now, she has been an assistant professor of biology and chemistry at the Trakia University and has held the administrative position of "Deputy Director of Educational and Qualification Activities".

2. General characteristics of the applicant's activity

Evaluation of the candidate's educational and pedagogical activity

The high evaluation of the educational and pedagogical activity and the preparation of the candidate for the position of "associate professor" can be justified by her professional commitment to the implementation of the mandatory teaching activities. Dr. Peneva has prepared and conducted training on **11** study courses and has developed **two** study programs of elective courses related to the methodology of teaching natural sciences and oriented to bachelor's and master's degrees, respectively. She leads the training of teachers in their postgraduate qualification. According to the presented curricula for two specializations of

teachers at DIPKU, I judge that Dr. Peneva leads classes in the following academic disciplines: Basic knowledge of natural sciences and technologies in the subject "Man and Nature" - third and fourth grade, study of natural sciences in primary school age, agro- and zootechnologies, basics of ecology and environmental protection, characteristics of the educational system of the subjects "Technology and Entrepreneurship" and "Man and Nature", opportunities for the application of ICT in "Man and Nature", as well as practical classes in a classroom and laboratory environment. The classes are quite varied in their specific and content, which speaks of the breadth of Dr. Peneva's professional competences.

To optimize her educational activity, she has developed 8 pcs. electronic aids for teachers and students, supporting their direct preparation for teaching the subject "Man and Nature" (grades 3-5).

All this determines the size and diversity of the pedagogical experience, which is the basis for a positive evaluation.

Evaluation of the candidate's scientific and scientific-applied activity

Dr. Peneva's research activity is related to independently organized scientific studies, whose contributions can be grouped in the following *thematic areas*:

"Man and Nature" teaching methodology (Articles numbered A1-3, A5-8, A11-A12 and A15). The content of these articles is oriented towards consideration of methodological ideas and some specific solutions for clarifying the nature and types of learning situations suitable for use in science education, formation of key competences in students through science education and a survey of the attitudes of teachers to use situational methods in pedagogical practice.

The monograph on "Situational learning for the formation of natural science literacy" is also in this direction. It briefly but systematically presents some theoretical and methodological issues in the use of situational methods in the educational process. As a contribution, I appreciate the description of the specific features in their application in the teaching of "Man and Nature", as well as the proposed methodological options for creating and resolving learning situations from the biological learning content of the integrated natural sciences course 5-6 grades.

Problems of the qualification of pedagogical specialists

In this direction, I see a contributing element that refers to the study of some problems of the qualification of pedagogical specialists. In three of his publications, Dr. Peneva analyzes the possibilities of some educational technologies (B1, B2, B10) such as problem-based learning, the dramatization of fairy tales with ecological content, role-playing games and the

integrative approach. In six publications, she described the didactic possibilities of some electronic resources, mostly for visualizing the teaching of the biological part of “Man and Nature” (A4, 5, 6, 7, 8, 9 and 12). In two of the articles, the candidate examines the topic of competence formation in the study of natural sciences in 5th and 6th grade (A2 and A3).

In the book proposed for evaluation "Mentoring in modern education" an author's model of the process of mentoring in various educational institutions is presented. In addition to being precisely structured, the model is comprehensive in terms of content components and contains a strictly regulated monitoring system.

In general, I give a positive assessment of the scientific and scientific-applied production presented by Dr. Peneva in the field of teaching methodology in natural sciences. To support this overall assessment of scientific contributions, the fact that the candidate's works have been cited in 24 publications, of which 3 in WoS and Scopus, can be pointed out.

The submitted report on the fulfilment of the minimum national requirements for holding the academic position "Associate Professor" shows that the candidate meets the requirements for the various groups of indicators. Reviewing the credibility of the data and evidence presented convinces me of their truthfulness and correctness.

3. Critical remarks and recommendations

I have the following recommendation for the candidate's scientific and teaching activities: In her future professional development, it is good for Dr. Peneva to direct her research efforts to more methodological studies of an empirical nature and of a wider size. In order to realize this, it is necessary to be more actively involved in a variety of project activities.

I recommend to increase the number of publications in international journals and conferences. It is desirable that she should include work with graduates and doctoral students in her teaching activity.

I do not know Dr. Peneva personally. I have found no evidence of plagiarism.

CONCLUSION

The documents and materials presented by **Assistant Professor Margarita Slavova Peneva meet all the requirements** of the Law on the Development of the Academic Staff in the Republic of Bulgaria (ZRASRB), the Regulations for the Implementation of the ZRASRB and the relevant Regulations of the Trakia University.

The candidate in the competition has submitted a **sufficient number** of scientific works published after the materials used in the defense of the ONS "doctor". The candidate's works include original scientific and applied contributions that have received international recognition, some of which have been published in journals and scientific collections issued by international academic publishing houses. Her theoretical developments have practical applicability, and most of them are directly oriented to academic work. *Dr. Margarita Slavova Peneva* **has the necessary** scientific and teaching qualifications.

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 conclusion** and recommend the Scientific Jury to prepare a report-proposal to the Council of DIPCU, Stara Zagora for the election of *Dr. Margarita Slavova Peneva* to the academic position of "associate professor" at DIPCU, Trakia University, Stara Zagora by professional direction 1.3. Pedagogy of learning in.. (Pedagogy of learning in natural sciences).

05.11. 2022

Plovdiv

Prepared the opinion:

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