REVIEWER'S OPINION by Prof. Dr. Petinka Radeva Galcheva fromKonstantin Preslavsky University of Shumen regarding the materials submitted for participation in the competition for getting the academic position of 'associate professor' at Thrace University, Stara Zagora in the field of higher education 1. Pedagogical sciences professional field 1.3. Pedagogy of teaching ...(Methodology of teaching natural sciences)

Opinion of the procedure and the candidate

I was appointed as a member of the academic jury by Order No. 1918/17.06.2022 issued by the Rector of Thrace University in a competition for taking the academic position of 'associate professor' in the field of higher education 1. Pedagogical sciences, professional field 1.3. Pedagogy of teaching... (Methodology of teaching natural sciences), announced for the needs of the Department of Information and Teacher Qualification (DIPKU).

The only candidate for the position which was announced in the State Gazette, no. 41 of 03.06.2022 was Margarita Slavova Peneva.

The materials submitted by M. Peneva in electronic version is in accordance with Art. 78 of the Regulations for the Development of the Academic Staff of Thrace University and includes all necessary documents.

The candidate submitted a total of 30 publications.

Dr. Margarita Peneva is a graduate of St. KlimentOhridski University of Sofia, where she received a master's degree with the professional qualification Teacher of Biology and Chemistry. She started his professional career in 2001 as a teacher of biology and chemistry at HristoBotev high school, Stara Zagora, where she worked until 2008. From 2008 to the present, she has been appointed successively an assistant professor in the methodology of teaching biology and chemistry; as a deputy director in teacher education and qualification at DIPKU; and again as an assistant professor in Methodology of teaching Biology and Chemistry at Thrace University. In 2018, she defended her dissertation in the academic field Theory of education and didactics on the topic "Modern aspects of mentoring as a form of qualification and continuing education of teachers".

The information presented in Dr. Peneva's professional CV are in accordance with the ZRASBR and the requirements of Art. 74 of the Regulations for the development of the academic staff of Thrace University.

General characteristics of the applicant's work

According to the submitted candidate's reference on the additional indicators under Art.57a (2) of PPZRASRB and Art. 81 (4) of the Regulations for the Development of the Academic Staff of Thrace University, the teaching activity of Dr. Peneva meets the established criteria and include: participation in the development of academic curricula and lecture courses for students of Bachelor and Master's degree, for teacher specializations in DIPKU (4 documents); as well as independent and co-authored published coursebooks with teaching materials. I would like to believe that thesedocuments exist, as the links provided by the candidate could not be opened. As Deputy Director of Educational and Qualification Activities at DIPKU, M. Peneva performedadministrative duties - leading and coordinating the educational and qualification activities of DIPKU, planning, organization and management of forms of training and qualification of pedagogical specialists, as well as teaching activities in various qualification forms related to teaching biology and chemistry.

For the purposes of the competition, Dr. M. Peneva submitted 30 publications (10 independent and 20 co-authored), of which two monographs, one article in a refereed and indexed edition, two summaries, 26 articles and reports from conferences. Of the presented publications, three are in English, one in Russian and 26 in Bulgarian. In addition, materials under the indicators "E" and "G" were included, according to the requirements of Thrace University.

Judging by the attached reference, Dr. M. Peneva only **formally** meets the national minimum requirements for holding the academic position of "associate professor". The reason for my conclusion is the fact that some of the publications are not on the field of the competition, while other publication had been used in the procedure for acquiring her doctoral degree.

After a careful study of the submitted publications, I can accept for evaluation only those of them that meet the profile of the competition and have been published in refereed or peer-reviewed journals. In this regard, I do not accept the following publications for analysis and assessment: A1, A8 which are summaries; B1 and B2 which are not in the profile of the competition, as they present a methodological version of a lesson in the Bulgarian language;B3, B6, B7, B8, B9 which were submitted in the procedure for a doctoral degree and thus should not be included in the current procedure; B10 which is not included in the National Reference List of contemporary Bulgarian peer-reviewed scientific publications; B1, B2, B3, B4, as they look like popular scientific announcements and not scientific publications, and as such do not correspond to the field of the competition.

Dr. M. Peneva submitted two monographs for participation in the competition.

The monograph *Mentoring in Modern Education* is based on the candidate's doctoral dissertation. The book is one of the few publications in which more serious research is presented. Unfortunately, I did not find in it new ideas developed and tested through experiment after the defense of her dissertation. I would not analyze it in more detail, since the monograph does not fit the field of the competition.

In the second monograph - *Situational learning for the formation of natural science competence*, presents the author's view on the possible applications of learning situations in the formation of natural science competence among students. In terms of content, the monograph represents a well-constructed whole, including theoretical and applied elements. A theoretical overview was made, aimed at clarifying the essence of the situational method and the types of learning situations in the context of the constructivism. I would like to draw attention to the need for terminological refinement of the used conceptual apparatus related to the types of situations.An invariant model of didactic technology for creating and resolving a

study situation in the subject *Man and nature*, and specific methodological options for implementing the technology was proposed. An expert evaluation was carried out to establish the attitude of teachers, university professors and experts from Regional Inspectorates of Education to the proposed methodological situations and the possibilities for their application in the learning process. Unfortunately, as in most of the candidate's publications, the real pedagogical experiment that would prove the effectiveness of the proposed methodology and that would make the research methods-oriented is missing.

According to the definition of a scientific article in ZRASRB, an "Article" is a published scientific work that meets the requirements for item 12, which contains a description of original scientific research and is up to 20 standard pages with 1,800 characters per page (SG, No. 30 of 2018). Based on the analysis of the other publications submitted for the competition (group A), I believe that only A15 fully corresponds to this definition, because only this article contains pedagogical research. In the other publications, theoretical conceptualisations and generalizations are made based on a very limited number of bibliographic sources and methodological options for the described problem, but there is no experimental verification for the purpose of evidence in the conditions of a real educational environment.

The content of publications B5 and B6 is informative and suitable for training teachers in various forms of qualification, as evidenced by some of the citations of these publications, but it cannot be accepted as a scientific article.

In conclusion: the analysis of Dr. Peneva 's articles and reports gives me reason to claim that they do not possess the merits of academic publications.

M. Peneva participated in a university project and in all three stages of an international project.

She has submitted 3 citations in publications in SCOPUS and Web of Science, 4 citations in peer-reviewed monographs and collective volumes, and 17 citations in non-refereed peer-reviewed publications. From the latter, I do not accept the citations of Demireva-Vatkova and Novakov, since the publication cited by them appears only in the bibliography, but not in the text of the articles.

When reviewing the candidate's contributions, I was surprised that the candidate provided a summary of some of the publications with which she participated in the competition and reported "contributions to the developed curricula, citations, popularization of project activities, etc." The wording of the reference itself is also inaccurate. I am left with the impression that Dr. Peneva does not understand the meaning of the term **"original scientific contributions"**.

In my opinion, Dr. Peneva 's contributions can be defined as follows:

1. A detailed theoretical analysis of the problem of situational teaching and its role in the formation of natural science literacy was carried out.

2. An invariant technology for situational teaching in *Man and nature* has been developed and methodological options for its implementation have been proposed. The proposed situations can be used in the work of teachers in the formation of natural science competence.

I recommend that Dr. Peneva in her future work should organize and implement scientific research that meets the requirements of didactics, and to direct her attention to increasing her publication activity in scientific journals at home and abroad, referenced and indexed in world-renowned databases with scientific information.

Conclusion

After familiarizing myself with the materials and publications submitted for the competition and their analysis, I find it necessary to give my **negative assessment** regarding the awarding of the academic position "associate professor" to Margarita Slavova Peneva, Ph.D as associate professor in the field of higher education 1. Pedagogical sciences, Professional field 1.3. Pedagogy of teaching..., (Methodology of teaching natural sciences), for the needs of DIPKU.

Reviewer:....

(Assoc. prof. PetinkaGalcheva, PhD)