

Scientific opinion

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field of higher education 4. Natural sciences, mathematics and informatics, professional field 4.5 Mathematics, scientific specialty "Mathematical modeling and application of mathematics", appointed a member of the scientific jury by order № 1692 / 09.07.2020 of the Rector of the Thrakia University - Stara Zagora

on the competition for "**Associate Professor**" in the field of higher education 4. Natural sciences, mathematics and informatics, professional field **4.5 Mathematics**, scientific specialty "Mathematical modeling and application of mathematics", announced in SG no. 42 of 12.05.2020 with candidate **Ch. Assistant Professor Miroslava Teneva Ivanova, PhD**, from the Department of Informatics and Mathematics at the Thrakia University - Stara Zagora

1. Brief introduction of the candidate.

The only candidate in the competition is Ch. Assistant Professor Miroslava Teneva Ivanova, PhD. She received her secondary education at the Natural and Mathematical High School "G. Milev" - Stara Zagora in 2003. In 2007 she graduated from Sofia University" speciality Applied Mathematics. In 2012 she successfully defended her dissertation in the scientific specialty "Geometry and Topology" and received an educational and scientific degree "Doctor". Her professional realization began in 2010 as a part-time assistant, later she was an assistant in 2016 and until now she is a chief assistant at the Faculty of Economics at the Thrakia University.

2. General description of the scientific production.

In the presented set of materials and documents for participation in the competition are arranged in accordance with the Regulations for borrowing academic positions of the Thrakia University.

In the competition for "Associate Professor" Ch. Assistant Professor Miroslava Teneva Ivanova, PhD presented her scientific output by groups of indicators in accordance with the Law on the Development of Academic Staff in the Republic of Bulgaria and the Regulations for its implementation, the Regulations of the Thrakia University, as follows:

Group of indicators	Scientometric indicator	Minimal number of scoresPoints	Number of scores of the applicant
A	Dissertation for the award of PhD	50	50
B	Habilitation work - scientific publications in publications that are referenced and indexed in a world-famous database of scientific information (Web of science, Scopus)	100	105
Г	Habilitation work - scientific publications in publications that are referenced and indexed in a world-famous database of scientific information (Web of science, Scopus)	200	276
Д	Citation in scientific publications, monographs, collective volumes and patents, referenced and indexed in a world-famous database of scientific information (Web of science, Scopus)	50	128

Attached publications and citations are in SCOPUS, ZbMATH or in journals with SRJ. Her personal participation in the 11 publications submitted for the competition is as follows: in 8 issues is the first author, in 2 issues is the second author, and in 1 issue is the fifth author. All works are co-authored, which is typical of the issue.

As a member of the scientific jury, I would like to argue with the fact that in the professional field 4.5 Mathematics is usually considered equal participation of each of the co-authors in a scientific work or publication. staff in the Republic of Bulgaria, as well as the specific minimum requirements for holding the academic position of "Associate Professor" of the Regulations of the Thrakia University. I will also note the fact that the need for teamwork is due to the breadth and scope of scientific - applied research in the scientific specialty Mathematical Modeling and Application of Mathematics. References for scientific contributions, for the fulfillment of the minimum national requirements, for publications in journals with Impact Factor (Journal Citation Report) and Impact Rank (Scopus), list of citations in Scopus and Web of Science are presented. Ch. Assistant Professor Miroslava Ivanova PhD, satisfies the

minimum requirements of the Law on the Development of Academic Staff in the Republic of Bulgaria, as well as the specific minimum requirements for holding the academic position of "Associate Professor" of the Regulations of the Thrakia University.

3. General characteristics of the teaching, scientific and scientific-applied activity of the candidate.

From the presented detailed documentation it is evident that Ch. Assistant Professor M. Ivanova, PhD has 7 years of pedagogical experience, completely sufficient for her growth as a teacher. She has given lectures and exercises in the following disciplines: Mathematics, Mathematics Part I, Mathematics Part II, Quantitative Methods. As a lecturer, M. Ivanova has participated in the development of curricula for students in the following specialties: Ecology and Environmental Protection, Agricultural Engineering, Business Economics.

I accept the author's reference for the contributions in the works of Ivanova, which are a logical consequence of the results obtained and have theoretical and applied significance. In essence, the results of Ivanova are scientific and practical and can be thematically related to the field of applied mathematics.

The candidate's scientific contributions are qualified in two categories:

- I. Original scientific contributions - Scientific papers on almost contact B - metric manifolds**
- II. Scientific - applied contributions**
 - ❖ Application in physics
 - ❖ Application in quantum chemistry
 - ❖ Application of mathematics for risk assessment and health index
 - ❖ Mathematical models using plant, biological and chemical data

In Ivanova's publications, solutions have been achieved in stages, which are shaped as approaches and improve the processes of integrated research. The obtained resultant information from the applied methodical solutions through mathematical models and statistical approaches in the works of Ivanova, PhD has been used in analyzes by various researchers.

The total number of citations not only meets the requirements for the position of "Associate Professor at the Thrakia University, but significantly exceeds them.

4. Remarks and recommendations.

I have no critical remarks to the submitted materials and documents on the competition. They are diligently and perfectly arranged and presented. Ivanova has scientific potential and therefore I will make a recommendation for her future work - to write a monograph or review article. The significance of the scientific and applied developments can be seen from the level of citation, which speaks of the good quality of the scientific research of the chief assistant. Ivanova and for their high appreciation by the scientific community.

5. Personal impressions of the candidate.

I have known the candidate since 2011 as a doctoral student at Plovdiv University. I have very good impressions of her personal and professional qualities. From the presented articles all are co-authored and it can be seen that she works perfectly in a team. All this speaks of her high professionalism.

6. Conclusion.

After getting acquainted with the materials presented in the competition and based on the analysis of their significance, I confirm that Ch. Assistant Professor Miroslava Teneva Ivanova, PhD, meets the requirements of LDASRB, of its Rules of Procedure and of the Rules of the Specific Requirements for Acquisition of Academic Degrees and Occupation of Academic Positions "Associate Professor" of the Thrakia University. For its application for the academic position of I justify this decision of mine with the following: Ch. Assistant Professor PhD Ivanova appears at the competition in compliance with all necessary requirements and with proper and properly completed documents.

All this gives me reason to evaluate positively its overall activity.

I allow myself to suggest to the esteemed Scientific Jury also to **vote positively**, and the Faculty Council at the Faculty of Economics at the Thrakia University - Stara Zagora to **elect Ch. Assistant Professor Miroslava Teneva Ivanova, PhD for "Associate Professor" in the scientific specialty "Mathematical Modeling and Application of Mathematics" in the professional field 4.5 Mathematics in higher education 4. Natural sciences, mathematics and informatics.**

Date: 13.08.2020 r.
Plovdiv

Assessor
(assoc. prof. Vélíka Nikolaeva Kuneva, PhD)