

STATEMENT

By Prof. Evdokia Nikolaeva Sotirova, PhD,

University "Prof. D-r Asen Zlatarov" - Burgas

on the documents submitted by Chief assistant Velichka Nikolova Traneva, PhD

for participation in the competition for acquiring the academic position "Associate Professor", in the field of higher education: 4. Natural Sciences, Mathematics and Informatics; Professional field 4.6. Informatics and Computer Science;

Scientific specialty "Informatics (Quantitative methods, mathematical modeling and intuitionistic fuzzy statistics)"

announced in the Government Newspaper 105 /11.12.2020

The reason for writing the present statement is Order № 35/09.02.2021 of the Rector of the University "Prof. D-r Asen Zlatarov" - Burgas for selecting the members of the Scientific jury and Protocol 1 from the session of the Scientific jury. The present review is prepared according to the Law on the Development of the Academic Staff in the Republic of Bulgaria, the Regulations for its implementation and the Regulations on the terms and conditions for obtaining scientific degrees and holding academic positions at the University "Prof. D-r. Asen Zlatarov"- Burgas.

Chief Assistant Velichka Nikolova Traneva, PhD is the only participant in the competition.

1. General information about the candidate

Velichka Nikolova Traneva has a master's degree from Sofia University "St. Cl. Ohridski", specialty mathematics and qualification for teacher of mathematics and informatics in 1995. In 2000 she also completed a master's degree in finance. In 2017 she acquired an educational and scientific specialty "PhD" in the scientific specialty "Informatics and Computer Science" at the Institute of Biophysics and Biomedical Engineering - BAS.

In 2012 he won a competition for an assistant professor, and in 2017 after winning a competition she was elected as chief assistant in "Informatics and Computer Science" at the University "Prof. D-r. Asen Zlatarov"- Burgas.

2. Description of the submitted materials

The candidate participates in the competition with 16 works, not used in previous procedures, distributed as follows:

- One independent monograph (in English);
- One co-authored monograph,
- 11 articles, of which one with Impact factor (IF), seven with SJR index (6 in quartile Q3, 1 in quartile Q4), three indexed in Scopus without SJR index;
 - One textbook and two teaching aids.

Also presented are: documents for work experience, for participation in research projects; references and evidence for: fulfillment of the minimum requirements, for the citations of the candidate's publications, for teaching and teaching activity, for participation in the organization of scientific forums; author's reference for the scientific contributions; copies of scientific papers.

All documents and references required for the academic position of "Associate Professor" are presented.

3. General characteristics of the scientific, scientific-applied activity and assessment of the personal contribution of the candidate

The scientific interests of Velichka Traneva are fully in the area of the competition.

A monograph on the topic "Index matrices in the assessment of human resources", published by the Union of Scientists in Bulgaria, was presented, with which the candidate receives the required 100 points under *Indicator B3*. The presented author's research on the application of the approach of intercriteria analysis on multidimensional fuzzy data are very current.

According to *Group of Indicators G*, 12 scientific works of V. Traneva are presented - 1 according to *Indicator G6* and 11 according to *Indicator D7*, with which she receives 344 points with a minimum required by the Regulations of the University 300 points. The co-authored monograph "Indexed matrices as a tool for management decisions" presented here is based on the dissertation of the candidate for application of indexed matrices for solving transport problems, but introduces a new internal operation on extended indexed matrices. The scientific publications in this group are mainly focused on mathematical modeling and intuitionistic fuzzy statistics. A good approach is the reflection of the main results of the research activity of Velichka Traneva in the educational process. The topic of intuitionistic fuzziness of correlation analysis is included in the curriculum developed with her participation in "Quantitative Methods". The textbook "Quantitative Methods and Optimization" is aimed at the application of intuitionistic fuzzy analysis of variance.

I believe that the scientific and scientific-applied contributions mentioned in the "Summary of the scientific contributions" correctly reflect the achievements in the scientific works for participation in the competition. They are mainly in the area of indexed matrices and intuitionistic fuzzy statistics.

On the publications presented in the competition, 14 citations excluding self-citations in Scopus and 1 citation in Zentralblatt were noticed, of a total of 6 publications of V. Traneva. She

has 116 points in *Group of indicators D* with a minimum requirement of the University Regulations of 100 points.

Chief Assistant Traneva has 120 points in *Group of indicators E* with a minimum requirement of the University Regulations of 100 points. In the "Statement of the minimum requirements" she provided information for participation in the teams of a four research projects two to the Research Fund, one under the National Research Program "Information and Communication Technologies for a Digital Single Market in Science, Education and Security" and one under the National Research Program "Young Scientists and Postdoctoral Fellows".

The total number of points achieved by Chief Assistant Traneva is 730, with a requirement of 650 points under the Regulations of the University.

In addition, in the documents for participation in the competition there is information for the candidate's experience in organizing university and international scientific forums. Chief Assistant Traneva is a reviewer in the Soft Computing journal, a member of the Union of Scientists and the Union of Mathematicians in Bulgaria. According to the reference "*Participation in projects*" V. Traneva is head of the teams and a member in 3 research projects at the University.

4. Teaching and learning activities of the candidate.

Chief Assistant Velichka Nikolova Traneva, PhD has almost 10 years of teaching experience at the University. She conducts lectures and exercises for students in the Bachelor's and Master's degrees. She has participated in the development of curricula in the three disciplines, in which she also leads lecture courses "Methods of teaching informatics with hospice", "Quantitative methods in management" and "Mathematical modeling and optimization". I evaluate with high evaluation the textbooks developed by the candidate. V. Traneva has participated in various university courses, seminars and various university educational activities. According to the attached documents, under her guidance, two students successfully defend their Master's degrees diploma works.

6. Personal impressions

My impressions of Velichka Traneva are very good and I can define her as extremely purposeful and thorough in her work. She has serious scientific and applied scientific achievements, which establish her as a successful and competent researcher.

6. Conclusion

The presented documents by Chief Assistant Velichka Traneva fully meet the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria, the Regulations for its implementation. The number of points in the groups of scientometric indicators satisfies the minimum number of points according to the Regulations on the terms and conditions for obtaining scientific degrees and holding academic positions at the University "Prof. D-r. Asen Zlatarov"-Burgas.

This is a reason to give my positive assessment of the materials for participation in the competition and to recommend to the esteemed members of the Scientific Jury to vote for the award of Chief Assistant Velichka Nikolova Traneva, PhD на академичната длъжност "доцент" at the University "Prof. D-r. Asen Zlatarov"- Burgas in Professional field 4.6. Informatics and Computer Science.

25.03.2021 Burgas Signature: (Prof. E. Sotirova)