Attitude

Assistant Professor Dr. Velichka Nikolova Traneva

in the competition for academic position "Associate Professor"

in the professional field 4.6 "Informatics and Computer Science"

specialty "Quantitative Methods, Mathematical Modeling and Intuitionist Fuzzy Statistics"

Reviewer: Prof. Stefka Stoyanova Fidanova

By Order No РД-35 of 09.02.2021 of the Rector of Burgas University "Assen Zlatarov" on the grounds of Art. 4, para. 2 of the law and the decision of the dean of FAS No 326 from 02.02.2021 I was appointed a member of the scientific jury under the procedure for the academic position of "Associate Professor" in the professional field 4.6 "Informatics and Computer Science", scientific specialty "Quantitative Methods, Mathematical Modeling and Intuitionist Fuzzy Statistics" announced for the needs of FAS at Burgas University "Assen Zlatarov" in the State Gazette No 105/ 11.12.2020. As a member of the Scientific Jury I have received all the documents attached to the application to the Rector of Burgas University "Assen Zlatarov" of the only candidate for the competition, Assistant Professor Dr. Velichka Nikolova Traneva.

According to the Law on the Development of the Academic Staff in the Republic of Bulgaria, the regulations for its implementation and the specific requirements introduced in the regulations of Burgas University "Assen Zlatarov" applicants must meet the following requirements:

1. Have acquired a doctorate degree in education and science;

2. Have held the academic position of "Associate Professor" at the same or another higher education institution or scientific organization for at least two academic years;

3. Have submitted published monographs or equivalent publications in specialized scientific editions which do not repeat the ones submitted for the acquisition of the educational and scientific degree "Doctor", the scientific degree "Doctor of Sciences" and for the occupation of the academic position "Associate Professor";

4. Have presented other original scientific works, publications, inventions and other scientific and applied scientific works which are evaluated in aggregate;

5. Meet the national minimum requirements;

6. Not to have plagiarism proven by statutory order in scientific works.

Assistant Professor Dr. Velichka Traneva acquired educational and scientific degree "Doctor" (diploma No 000849 issued it 27.02.2017 from Bulgarian Academy of Sciences) on the basis of a defended dissertation.

For Group B requirements, Velichka Traneva summited monograph, published in academic publisher of the Bulgarian Academy of Sciences. The total number points is 100 for required 100.

For Group G indicators, a total of 11 publications are presented, one monograph in Bulgarian language one article with Impact Factor in Q2, 7 publications with Impact Rank and 3 in the global indexing and referral system, without an impact factor or impact rank, the total number points is 344 for required 300.

Dr. Velichka Traneva submitted 15 citations by other authors. 14 of them are with impact factor or impact rang and 1 is visible in WoS / SCOPUS. The total number of points is 116 with a required 70 under indicator D.

Dr. Velin Andonov participated in two projects, funded by the national scientific fund and other two funded by the Ministry of Education and Science. She is the author of one textbook and two teaching aids. The total number of points is 120 with the required 100 under indicator E.

Assistent Professor Velichka Traneva fulfills and, by some indicators, significantly exceeds the national requirements, as well as the specific requirements of Burgas University "Assen Zlatarov" for the academic position of "Associate Professor".

Velichka Traneva's scientific works are in the field of indexed matrices and intuitionist fuzzy statistics. They are aimed at expanding the theory of indexed matrices and intercriteria analysis. Applications have been made for an oil refinery, for a mobile company and for a fast food chain.

The candidate's contributions can be divided into scientific and scientific-applied. Scientific contributions include:

1. Extensions of intercriteria analysis on data stored in three-dimensional, interval and multidimensional intuitionist fuzzy indexed matrices.

2. A new internal operation Index on extended indexed matrices is defined.

3. 10 hierarchical operations have been introduced, generating a scale for ranking the matrix data.

4. An extended form of intuitionistic fuzzy intercriteria analysis has been developed.

5. A transport problem has been formulated in which the costs of transport, supply and demand are intuitionistically blurred.

6. One-factor and two-factor intuitionistic fuzzy analysis have been developed.

The scientific-applied contributions are systematized as follows:

1. Application of extended intercriteria analysis in an oil refinery, in a mobile company and in a fast food chain.

2. Application of the Index operation in the Hungarian method for solving assignment problem.

3. Applications of the new scaling aggregation operations in the OLAP cube are shown.

4. Modeling using indexed OLAP matrices and various applications.

5. Software for intuitionistic fuzzy one-factor and two-factor analysis has been developed. It is applied to data on daily cases of COVID-19.

I know the candidate and her scientific work from the participation in scientific forums that I have organized. I was left with excellent impressions of her work and ability to present her to an audience.

The materials presented by the candidate are complete and detailed. They contain the necessary information required by law. I have only one remark on the presentation of the contributions. They could be summarized and presented in a more concise way.

CONCLUSION

According to the presented documents, the candidate Velichka Traneva ulfills all the requirements of the law and the Regulations to it and the Regulations for the specific requirements for acquiring academic degrees and occupying academic positions at Burgas University "Assen Zlatarov". I give a positive conclusion for the selection of Velichka Traneva n the competition for the academic position of "Associate Professor" in the professional field 4.6 "Informatics and Computer Science", scientific specialty "Quantitative Methods, Mathematical Modeling and Intuitionist Fuzzy Statistics".

I propose that the Scientific Jury unanimously vote on a proposal to the Scientific Council of FAS at Burgas University "Assen Zlatarov". to select Assist. Prof. Veli`ka Traneva or the academic position "Associate Professor" in the professional field 4.6 "Informatics and Computer Science", scientific specialty "Quantitative Methods, Mathematical Modeling and Intuitionist Fuzzy Statistics".

08.03.2021