Attitude of Reviewer

in the competition for academic position

"Associate Professor"

in the professional field 4.6 "Informatics and and computer science"(Programming and Algorithms)

for the needs of Sofia University "St. Kliment Ohridski"(SU)

Faculty of Mathematics and Informatics (FMI)

announced in State Gazette issue 65 of 16.08.2019 and on the Internet page of FMI

The opinion was prepared by: Prof. PhD Stefka Stoyanova Fidanova, IICT-BAS, professional field 4.6 "Informatics and and computer science", as a member of the Scientific Jury of the competition according to order № 38-591 / 11.10.2019 of the Rector of Sofia University.

One candidate has submitted documents for participation in the announced competition:

Assoc. Prof. Nora Angelova Angelova – SU "St. Kliment Ohridski".

I. General description of the materials presented

1. Data of the candidature

The submitted documents from the applicant meet the requirements of the Law on the Development of Academic Staff in the Republic of Bulgaria (LDASRB) and The Rules on the Terms and Conditions for Acquisition of Academic Degrees and Occupation of Academic Positions at Sofia University "St. Kliment Ohridski ".

The candidate Nora Angelova Angelova has submitted a list of 23 titles for the competition. 23 publications in Bulgarian and foreign scientific publications and scientific forums, 0 studios, 0 monographs, 0 books, 0 certificates and patents, 0 textbooks and teaching aids. Six other documents (in the form of job descriptions and certificates from an employer, project manager, project sponsor or sponsor, references and reviews, awards and other relevant evidence) supporting the applicant's achievements were also presented.

2. Data of the candidate

Nora Angelova received a Bachelor's Degree in Computer Science in 2012 and a Master's Degree in eBusiness and e-Governance from the Sofia University "St. Kliment Ohridski ". In the period 2014-2017 she is a full-time PhD student at IBFBME - BAS where she obtained a PhD degree in 2017. From 2017 till present she is an Assistant Professor in FMI of SU.

3. General characteristics of the applicant's scientific work and achievements

For Group B requirements, Nora Angelova submitted 5 publications, 4 of them with impact rang and one in the World Indexing and Referencing System, without Impact Factor or Impact Rank. The total number of points is 138 for the required 100.

For Group Г indicators, a total of 12 publications are presented, one is with impact rang and the others are in the World Indexing and Referencing System, without Impact Factor or Impact Rank. The total number of points is 228 for the required 200.

Assist. Prof. Nora Angelova ubmitted 9 citations of 4 publications, visible in SCOPUS. The total number of points is 52 for the required 50 under indicator Д.

a) the scientific works comply with the minimum national requirements (under Art. 2b, para 2 and 3 of LDASRB) and respectively with the additional requirements of Sofia University "St. Kliment Ohridski "for the academic position of Associate Professor in the scientific field and professional direction of the competition;

b) the scientific papers submitted by the applicant do not repeat those of previous procedures for the acquisition of a scientific title and occupation of an academic position;

c) there is no proven plagiarism in the scientific works presented at the competition.

4. Characterization and evaluation of the applicant's teaching activity

Nora Angelova has taken 5 undergraduate courses in Computer Science and Software Engineering, and 3 of them have taken classes. She has taken classes of two other courses. She also has two successfully defended graduates in 2018 and 2019.

5. Substantive analysis of the scientific and applied scientific achievements of the candidate contained in the materials for participation in the competition

The main contributions to his research can be summarized as follows:

1. In the field of Generalized Nets (3 publications): New extensions of generalized nets have been defined and a new application area introduced.

The ability to use generalized nets, related to software protection has been expanded. Is given a possibility to apply generalized networks in little known areas. Guidelines for future developments in this area are given.

2. In the field of Intuitionistic fuzzy logic (15 publications): Expansion and optimization of IFSTool software to study the satisfaction of different axioms and define new implications.

The satisfaction of different axioms of certain implications and their corresponding negations is shown, three new groups of conjunctions and disjunctions are introduced, new implications,

changes and optimizations of the IFSTool software product are introduced.

3. In the field of Intercriteria analysis: (4 publications): Application of intercriteria analysis in various fields. Expanding the object area and rules used by the algorithm.

Intercriteria analysis is a new approach to decision making in multi-criteria tasks. The approach is based on intuitionistic fuzzy sets and indexed matrices and seeks a link between the individual criteria. A modification has been made to the algorithm so that it can be applied to intuitively fuzzy objects.

6. Critical notes and recommendations

The contributions are pretty dilute. They needed to be more rigorously defined.

7. Personal impressions of the applicant

I know the candidate from her PhD period. I have attended her seminars. We have participated in joint scientific projects. I was impressed by her modesty and hard work. I can say that she is a fully built and very promising scientist.

8. Conclusion on the application

After learning about the materials and scientific works presented in the competition, and on the basis of the analysis of their importance and the scientific and applied contributions contained therein, I confirm that the scientific achievements meet the requirements of LDASRB. The Regulations for its implementation and the corresponding Regulations of Sofia University "St. Kliment Ohridski "for the position of the candidate in the academic position of Assoc. Professor in the scientific field and professional direction of the competition. In particular, the applicant meets the minimum national requirements in the professional field and no plagiarism has been detected in the scientific papers submitted at the competition.

I give my **positive** opinion to the application.

II. Overall Conclusion

On the basis of the above, I recommend that the scientific jury propose to the competent body of choice of the Faculty of Mathematics and Informatics at Sofia University "St. Kliment Ohridski "to choose Nora Angelova Angelova to take the academic position of Assistant Professor in the professional field 4.6 "Informatics and and computer science"(Programming and Algorithms)

11.11.2019   Written by:

(Prof. Stefka Fidanova)