

OPINION

**on a competition for the occupation of an academic position “Associate Professor”,
in the professional field 4.6. Informatics and computer sciences
(Programming and Algorithms),
for the needs of the Sofia University St. Kliment Ohridski,
Faculty of Mathematics and Informatics (FMI),
declared in the Darjaven Vestnik No. 65 of 16.08.2019 and on the websites of FMI and SU**

The opinion was prepared by Full Professor Lyubka Atanasova Doukovska, DSc from the Institute of Information and Communication Technologies at the Bulgarian Academy of Sciences, professional field 4.6. Informatics and Computer Sciences (Programming and Algorithms), scientific field 4. Natural sciences, mathematics and informatics, as a member of the scientific jury for the competition according to Order No. BO38-591 from 11.10.2019 of the Rector of Sofia University.

Only one candidate has submitted documents for participation in the announced competition:

Assistant Professor Nora Angelova Angelova, PhD from the Faculty of Mathematics and Informatics at the Sofia University St. Kliment Ohridski.

I. General description of the materials presented

1. Details of the application

The submitted documents from the applicant comply with the requirements of the *Development of Academic Staff Act in the Republic of Bulgaria* and the Regulations on the conditions and procedures for acquiring scientific degrees and occupying academic positions at the Sofia University St. Kliment Ohridski.

To participate in the competition the candidate Assist. Prof. Nora Angelova Angelova has presented a list of 23 titles, papers in Bulgarian and foreign scientific publications and scientific forums. Nineteen other documents (in the form of job descriptions and employer certificates and other relevant evidence) supporting the applicant's achievements were also presented.

2. Details of the applicant

Nora Angelova Angelova was born on September 18, 1989 in Sofia. In 2012 she received her Bachelor's Degree in Informatics from the Faculty of Mathematics and Informatics at the Sofia University St. Kliment Ohridski. In 2013 she received her Master's Degree in Master's Degree Program in Electronic Business and Electronic Management from the Faculty of Mathematics and Informatics at the Sofia University St. Kliment Ohridski. In 2017, she obtained her PhD degree in Informatics from the Institute of Biophysics and Biomedical Engineering at the Bulgarian Academy of Sciences.

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

The submitted candidate's scientific papers for participation in the competition are divided into four thematic groups:

1. Aggregated networks covering publications [4, 5, 6];
2. Intuitionist fuzzy logic, covering publications [1, 2, 9-13, 15-18, 20-23];
3. InterCriteria analysis covering publications [7, 8, 14, 19];
4. Other, covered by publication [3].

The candidate has also provided a citation list, which contains a total of 16 citations in 9 publications. I accept that this number is at the time of submission of the application documents and no new quotations are included.

The scientific works meet the minimum national requirements (according to Art. 2b, # 2 and # 3 of the *Development of Academic Staff Act in the Republic of Bulgaria*) and respectively the additional requirements of the Sofia University St. Kliment Ohridski for the academic position of "Associate Professor" in the scientific field and professional direction of the competition.

The scientific papers presented by the applicant do not repeat those of the previous procedures for acquiring a scientific title and academic position.

There is no proven plagiarism in the scientific works presented at the competition.

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

Since 2010, Nora Angelova Angelova has been a part-time teaching in the Faculty of Mathematics and Informatics at the Sofia University St. Kliment Ohridski and has been conducting laboratory and seminar classes. The applicant has provided a reference for her

teaching activity, which includes the following courses in the Faculty of Mathematics and Informatics at the Sofia University St. Kliment Ohridski:

- Programming Introduction (Lectures and / or Exercises) - Compulsory Bachelor's Degree Programs in Computer Science, Computer Science, Information Systems;

- Object Oriented Programming (Lectures and / or Exercises) - Compulsory Bachelor's Degree Programs in Computer Science, Computer Science and Information Systems;

- Object-oriented programming, practicum (exercises) - elective courses for bachelors in the fields of Computer Science, Computer Science and Information Systems;

- Data and Programming Structures (Lectures and / or Exercises) - Compulsory Bachelor's Degree in Computer Science, Computer Science and Information Systems;

- Data Structures and Programming, Practicum (Exercises) - elective courses for bachelors in the fields of Computer Science, Computer Science and Information Systems;

- Data Structures and Algorithms (Lectures) - Compulsory Bachelor's Degree Program in Software Engineering;

- Communication and presentation skills (lectures) - elective course for bachelors in all specialties.

Under the guidance of Assist. Prof. Nora Angelova Angelova there are two successfully defended MSc graduates from the Faculty of Mathematics and Informatics at the Sofia University St. Kliment Ohridski.

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

I accept the contributions formulated in the report on the results of the applicant's research activities in the works by which Assist. Prof. Nora Angelova Angelova participates in the competition. These results have scientific and scientifically applied nature and can be defined as enriching the existing scientific field with new knowledge.

6. Critical notes and recommendations

I recommend Assist. Prof. Nora Angelova Angelova to focus her efforts on publishing the results of the scientific activity in reputable international publications.

7. Personal impressions of the applicant

I know Nora Angelova Angelova from her doctoral studies at the Institute of Biophysics and Biomedical Engineering at the Bulgarian Academy of Sciences. I have excellent impressions

of her work as a doctoral student and as a participant in a team of research projects. I believe that the applicant has the skills to work in a team, as an initiative, seeking and problem-solving specialist, who achieves original scientific results with a lot of hard work and perseverance.

8. Conclusion on the application

Having become acquainted with 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 the *Development of Academic Staff Act in the Republic of Bulgaria*, the Regulations for its implementation and the corresponding Regulations of the Sofia University St. Kliment Ohridski for the position of the candidate in the academic position of “Associate 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. GENERAL CONCLUSION

On the basis of the above, I recommend that the scientific jury proposes to the competent body of choice of the Faculty of Mathematics and Informatics at the Sofia University St. Kliment Ohridski to choose **Assistant Professor Nora Angelova Angelova** to occupy the academic position of “**Associate Professor**” in the professional field 4.6. Informatics and Computer Science (Programming and Algorithms), scientific field 4. Natural Sciences, Mathematics and Informatics.

19.11.2019
Sofia

Opinion prepared by:

/Prof. Lyubka Doukovska, DSc/