Report

on a competition for the occupation of the academic position "Professor"

in the professional field 4.6 Informatics and Computer Science,

(Information Technologies),

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

Faculty of Mathematics and Informatics (FMI),

announced in the State Gazette, № 74/21.08.2020 and on the websites of FMI and SU

by Prof. Dr. Kalinka Kaloyanova

Sofia University St. Kliment Ohridski, Faculty of Mathematics and Informatics

I am presenting this opinion as a member of the Scientific jury in the above-mentioned competition, on the base of the Order № РД 38-496/19.10.2020 of the Rector of Sofia University St. Kliment Ohridski.

The only candidate for the competition is Associate Professor Eliza Petrova Stefanova from the Faculty of Mathematics and Informatics – Sofia University.

General presentation of the submitted materials

It is clear from the presented documents that Assoc. Prof. Eliza Stefanova meets the requirements for the occupation of the academic position of "Professor", which are specified in the Act for the Development of the Academic Staff in the Republic of Bulgaria and the Rules on the Terms and Conditions for Acquisition of Academic Degrees and Occupation of Academic Positions at SU:

- She has a Ph.D. degree diploma № SU 2012-156/17.12.2012 (Sofia University St. Kliment Ohridski).
- She has presented nine publications that meet the group "B" requirements. Five of them are published in journals or series with SJR and four publications are referred to and indexed in Scopus and/or Web of Science (WoS). These publications are not used for other procedures. The total number of points is 222 for the required 100.
- Three of the publications that meet the requirements of the group "Γ" are in editions with Impact Rank (SJR), one publication is indexed in Scopus & WoS, one publication is indexed in ACM DL, and six publications are indexed Web of Science. Thus, the total number of points in this group is 234 for the required 200. The publications are not used for other procedures.

- A list of 38 citations in Scopus & WoS is presented 296 points, which meet the requirements of group "Д" of indicators.
- She has held academic positions for more than 5 years an official document indicates a total of 21 years of work experience at different academic positions at Sofia University (Assistant Professor and Associate Professor). Assoc. Prof. Eliza Stefanova has been actively involved in many national and international educational and scientific projects. Also, she is the supervisor of a successfully defended doctoral student. Thus, she covers the indicators from group "E" (150 points for the required 100).
- There is no identification of plagiarism in the presented publications.

All presented documents are detailed and well-systematized and provide not only the publications but also the necessary evidence to them.

A short CV

Eliza Stefanova graduated from the Faculty of Mathematics and Informatics in 1991. In the period 1990-1999, she worked at the University Computer Centre (UCC) - SU. Since 1999 she has held academic positions at FMI. Eliza Stefanova obtained her Ph.D. degree in Informatics at the Sofia University in 2013. In 2014 she was elected Associate Professor in the Faculty of Mathematics and Informatics. From 2015 until now she is a Vice-Rector of Sofia University St. Kliment Ohridski.

General characteristics of the applicant's scientific work and achievements

Eliza Stefanova participates with twenty-one publications in this competition. All of them are written in English. The publications are mainly referred to and indexed in Scopus &WoS:

- Publications 1, 3, 6, 7, 14, 15, 18 indexed in Scopus;
- Publications 5, 9, 12, 13, 17, 19, 20, 21 indexed in Web of Science;
- Publications 2, 4, 8, 16 indexed in Scopus & Web of Science;
- Publication 10 indexed in ACM DL.

The publications were made in the period 2015-2020. Assoc. Prof. Stefanova co-authors all papers. No reference is made to the individual contributions of the co-authors, I accept that the contribution of the applicant in the publications is equal to other authors.

The main part of the publications (3, 4, 7, 9, 10, 12, 13, 14, 16, 20) present innovative methods of application of ICT for the purposes of education - virtual reality, competence-based learning, "flipped classroom", web services in education.

The applicant's work on creating new methods for increasing the competencies of teachers, related to the application of the scientific approach in education, is presented through several publications - 3, 12, 13, 15, and 19. Publications 1, 2, 13, 17, 18, and 21 supplement these studies with the development of 5 scenarios for the application of the research approach in teaching.

Several publications (4, 5, 6, and 8) present methods and services related to the collection and analysis of big data in education.

The publications demonstrate persistence in the development and application of the obtained results.

General characteristics of the applicant's teaching activities

The teaching activities of Assoc. Prof. Eliza Stefanova are wide-ranging. She successfully combines standard teaching methods with modern forms of teaching in an electronic environment. She leads a number of courses in the undergraduate program *Mathematics and Informatics* at FMI. She is responsible for the Master's program *E-Learning*. She supervised many graduate students and four doctoral students (one successfully defended). Assoc. Prof. Stefanova is a co-author of many textbooks and study guides for students.

Citations

The list of citations submitted for the competition presents 38 citations visible in ACM DL & Scopus & WoS. The overall list of the citations reports more than 200 citations.

Personal impressions of the applicant

I have known Assoc. Prof. Eliza Stefanova for many years and I have excellent impressions of her professionalism and active attitude to various aspects of the work of the Faculty of Mathematics and Informatics and Sofia University "St.Kliment Ohridski".

Comments and recommendations

I would recommend the candidate to continue her active teaching and research activities with the inherent knowledge and consistency in her work.

Conclusion

In conclusion, the documents and materials presented by Assoc. Prof. Eliza Stefanova declare results that meet all requirements of the Act of the Development of the Academic Staff of the Republic of Bulgaria, the Rules for its implementation, and the corresponding

Regulations of Sofia University "St. Kliment Ohridski" for the occupation of the academic position of "Professor" in the scientific field 4. Natural Sciences, Mathematics and Informatics, professional field 4.6. Informatics and Computer Sciences, Informatics. I strongly recommend the scientific jury to vote on a proposal to the Council of the Faculty of Mathematics and Informatics of Sofia University St. Kliment Ohridski to elect Assoc. Prof. Dr. Eliza Petrova Stefanova for the academic position of "Professor" in the professional field 4.6 Informatics and Computer Science (Information Technologies).

December 1, 2020 Sofia Signature:

/Prof. Dr K. Kaloyanova/