OPINION

by Prof. Asen Kanchev Rahnev, Ph.D.

on a competition for holding the academic position of "Professor" for the needs of the University of Plovdiv "Paisii Hilendarski", announced in SG № 34/03.05.2022 in the field of higher education 4. Natural sciences, Mathematics, and Informatics, professional field 4.6 Informatics and Computer Science (Informatics – Software Technology)

By order № RD-21-1254/30.06.2022 of the Rector of the University of Plovdiv "Paisii Hilendarski", I have been appointed a member of the Scientific Jury in connection with the announced competition for the academic position of "**Professor**" in SG № 34/03.05.2022 in the field of higher education 4. Natural sciences, Mathematics, and Informatics, professional field 4.6 Informatics and Computer Science (Informatics – Software Technology).

To participate in the competition, documents have been submitted by only one candidate – Assoc. Prof. Asya Georgieva Stoyanova-Doycheva, Ph.D., from the Department of Computer Systems at the Faculty of Mathematics and Informatics of the University of Plovdiv "Paisii Hilendarski". The documents have been verified by a committee appointed by order № RD21-1260/30.06.2022 of the Rector of the University of Plovdiv "Paisii Hilendarski". According to the minutes of the committee meeting dated 5 July 2022, signed by all members without comments, the committee admits to the competition the only candidate Assoc. Prof. Asya Georgieva Stoyanova-Doycheva, Ph.D. The dean of the Faculty of Mathematics and Informatics at the University of Plovdiv "Paisii Hilendarski" notified the candidate of the committee's decision on 5 July 2022.

In my capacity as a member of the Scientific Jury, I have received all the documents attached to the application form with an incoming number RASD-08-60/28.06.2022 from Assoc. Prof. Asya Georgieva Stoyanova-Doycheva, Ph.D., to the Rector of the University of Plovdiv "Paisii Hilendarski" for participation in the competition.

Assoc. Prof. Asya Georgieva Stoyanova-Doycheva, Ph.D., is the author and co-author of a total of 85 scientific works. Of these, 40 scientific papers were submitted for participation in the competition:

- Publications in journals and book chapters 16 works, 2 of which with IF and 14 with SJR;
- Publications in conference proceedings and books 23 works;
- Textbooks 1 publication.

All the publications in journals, conference proceedings, and book chapters are in English, and the textbook is in Bulgarian. Of the presented 40 scientific papers, in which no plagiarism has been legally proven, Asya Stoyanova-Doycheva is the author of the textbook, the first coauthor in 8 of the papers, the second one in 9 of them, the third co-author in 10, the fourth in 7, and in 5 of them, she takes a subsequent place.

The main scientific and scientific and applied contributions in the publications of Asya Stoyanova-Doycheva, Ph.D., are in several scientific fields: Software engineering; Semantic modelling (ontology engineering); Development of a reference architecture of the Virtual Physical Space (ViPS) and its adaptation for different applications. The author's contributions can also be related to the adaptation of the proposed ViPS architecture to different application areas: E-learning; Cultural and historical heritage, and Smart agriculture.

Part of the obtained results by Assoc. Prof. Asya Stoyanova-Doycheva, Ph.D., was ably used in 13 research projects, of which 2 were international, 7 at the MES, and 4 university ones. Asya Stoyanova-Doycheva, Ph.D., has delivered 17 presentations at international conferences and national scientific forums with international participation.

Asya Stoyanova-Doycheva, Ph.D., has presented a list of 164 known citations in total, of which 50 are in SCOPUS or WoS. As of the date of writing this opinion, I am aware of more citations.

The teaching activity of Assoc. Prof. Asya Stoyanova-Doycheva, Ph.D., is extremely rich. She has lectured and conducted seminars in dozens of core disciplines: "Software Technology", "Software Technology 1", "Introduction to Software Engineering", and "Requirements Analysis and Specifications". During her years of teaching work, she has also conducted seminars in "Unified Modelling Language", "Databases", "A practical project in software technology", and others at the Faculty of Mathematics and Informatics of the University of Plovdiv "Paisii Hilendarski".

During the entire period of her teaching work, Assoc. Prof. Asya Stoyanova-Doycheva, Ph.D., has been actively involved in the students' extracurricular activities by assigning coursework and homework tasks and checking them. She works with graduate and doctoral students and participates in scientific seminars at the department; she has also published joint articles with students and doctoral students. Assoc. Prof. Asya Stoyanova-Doycheva, Ph.D., has developed 5 lecture courses. She participates in State examination and thesis defenses committees for bachelor's and master's degree programs at FMI. Under her guidance, one doctoral student and over 20 graduates have successfully defended their theses.

The research activity of Assoc. Prof. Asya Stoyanova-Doycheva, Ph.D., is in current areas of software technology, the semantic web, and electronic learning, which is a prerequisite for her good results in the educational process.

Assoc. Prof. Asya Stoyanova-Doycheva, Ph.D., is a member of the John Atanasoff Union of Automatics and Informatics – UAI.

I have known Asya Stoyanova-Doycheva for more than 20 years. She is a highly respected and authoritative lecturer, a responsible colleague and head of a department, a thorough researcher, and an accomplished scholar.

The candidate for the announced competition Assoc. Prof. Asya Stoyanova-Doycheva, Ph.D., fully meets the requirements of the Act for the Development of the Academic Staff in the Republic of Bulgaria (ADASRB), the Rules for the Implementation of the ADASRB (RIADASRB), the Law on the Development of the Academic Staff (LDAS) of the University of Plovdiv "Paisii Hilendarski", and the additional faculty requirements of the Faculty of Mathematics and Informatics at the University of Plovdiv "Paisii Hilendarski" for occupying the academic position of "Professor".

All of the above is a reason to give a **positive conclusion for the election** of Assoc. Prof. Asya Stoyanova-Doycheva, Ph.D., for **Professor** of "Informatics – Software Technology", professional field 4.6 Informatics and Computer Science, field of higher education 4. Natural sciences, Mathematics, and Informatics.

I propose to the honorable scientific jury to unanimously propose to the respected Faculty Council of the Faculty of Mathematics and Informatics at the University of Plovdiv "Paisii Hilendarski" to elect Assoc. Prof. Asya Stoyanova-Doycheva, Ph.D., for the academic position of "Professor".

26.08.2022 Reviewer:

Plovdiv /Prof. Asen Rahnev, PhD/