

OPINION

**On the Concourse for the academic position “Professor”
in professional direction 4.6 “Informatics and Computer Sciences”,
announced in State Gazette, Vol. 54 from 12.06.2026
for the needs of the Institute of Biophysics and Biomedical Engineering –
BAS, “Bioinformatics and Mathematical Modelling” Department,
with single applicant Assoc. Prof. Lyudmila Pavlova Todorova, PhD**

Assoc. Prof. Dr. Lyudmila Todorova was born on 11.08.1961 in the village of Brenitsa. In 1984, she graduated from the Technical University in Sofia with a Master's degree in Automation and Telematics, and in 2007 she received the educational and scientific degree "doctor". Since 1996 she has been working at the Central Laboratory of Biomedical Engineering "Prof. Ivan Daskalov" - BAS (now Institute of Biophysics and Biomedical Engineering - BAS) successively as a Research associate (now Assistant) from III to I degree, and since 2011 she has been an Associate Professor.

According to the "Report on the implementation of the minimum national requirements" under Art. 2b, para. 2 and 3 and the "Requirements of the Institute of Biophysics and Biomedical Engineering - BAS under Art. 2b, para. 5 for professional field 4.6. Informatics and Computer Sciences", candidates for the academic position of "Professor" must have 15 publications in journals with an impact factor.

For participation in the competition under indicator B4 in the "Habilitation Extended Report on Scientific Contributions", Assoc. Prof. Todorova has indicated 12 publications, of which 5 in journals with an impact factor, 4 - with SJR and 3 in refereed journals without an impact factor or SJR. These publications amount up to 144 points, which is 44% more than the minimum requirement (100 points) for group B, according to the "Requirements" of the Institute of Biophysics and Biomedical Engineering - BAS. According to indicators G7 and G8 of the "Reference", she has submitted 22 publications, of which 11 in journals with an impact factor, 7 - with SJR and 4 in journals without an impact factor or SJR. They amount up to 248 points, which is 13% more than the minimum requirement (220 points) for group G. According to indicator 11 (group E), the candidate has provided data for 520 citations (2184 points), which is 18 times more than the minimum requirement (120 points) for this group. According to indicators from group E, she has 190 points, which is 27% more than the minimum required (150) points. It is stated that Assoc. Prof. Todorova is the supervisor of one successfully defended doctoral student (with which she receives the minimum required number of 50 points), has participated in 6 national scientific projects, in one of which she is the coordinator of the team from our Institute, and has participated in 3 international scientific projects in bilateral cooperation. However, as a long-time leader of our projects with the Polish Academy, I can certify that she has participated in many more of these projects.

In total, Assoc. Prof. Todorova has 2816 points, which is more than 4.4 times more than the minimum number of 640 points. Therefore, the requirements of the "Rules" of the Institute of Biophysics and Biomedical Engineering - BAS are fully satisfied.

I will note that of the 16 articles with an impact factor of 3, 13 are in the Q1 quartile, and 13 are in the Q4 quartile.

I accept the formulated contributions of Assoc. Prof. Todorova in the "*Extended Report on Habilitation Scientific Contributions*" indicated in her documents. In my opinion, they correctly reflect the content of the publications with which she participated in the competition and therefore I will not comment on them. I was a reviewer of more than 1/3 of the articles with which she participated in the competition, and from the fact that they are in the list of her publications, it follows that I evaluated them positively at that time. Q1, 13 in Q4.

My only critical note is to the brief literature review dedicated to intuitionistic fuzzy sets (IFSs): the cubic IFs proposed by Garg and Kaur are the third type IFSs that I proposed 30 years earlier, and the paper [8] is a very special case of my 2007 paper with Gabriela Pasi and Ronald Yager.

As the author of the theories of IFSs and of the Intercriteria analysis, and one who attempts to keep in track with the development of these areas, I would like to emphasize that Assoc. Prof. Todorova is one of the actively working specialists in these areas in Bulgaria. Her results, listed in the "*Extended Reference for Habilitation Scientific Contributions*", are significant.

Assoc. Prof. Todorova is the author of a total of 110 articles, of which 18 with impact factor and 16 with SJR, and of 32 scientific conference reports published in full text. She indicates that she has a total of 598 citations, of which 230 are noted in *Scopus* and *Web of Science* (everywhere without self-citations). Her H-index in *Scopus* is 6, and in *Web of Science* – 5.

The candidate's scientometric indicators meet the requirements of the ZRAS, the Regulations for its implementation and the Regulations of the Institute of Biophysics and Biomedical Engineering – BAS.

I have known Assoc. Prof. Todorova since 1996, when she started working at the Central Laboratory of Biomedical Engineering - BAS, and during these 30 years we have been members of the same Department. My impressions of her are that she is an active specialist, working purposefully in the areas that fall within the scope of her scientific interests.

All of the above justifies my positive evaluation of the presented materials for participation in the concourse, and my recommendation to the respected members of the Scientific Jury, and the respected members of the Scientific Council of the Institute of Biophysics and Biomedical Engineering – BAS, to vote for awarding **Assoc. Prof. Lyudmila Pavlova Todorova** the academic position "**Professor**" in professional direction **4.6 "Informatics and Computer Sciences"**.

15.10.2026

Opinion presented by:
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