

REVIEW

by Corr. Member, Lyubka Atanassova Doukovska, DSc from the Institute of Information and Communication Technologies, at the Bulgarian Academy of Sciences, on the Competition for the academic position "Associate Professor", under the Scientific Field: 4. Natural Sciences, Mathematics and Informatics, the Professional Area: 4.6. Informatics and Computer Sciences, for the needs of the Intelligent Systems Department of the Institute of Information and Communication Technologies, at the Bulgarian Academy of Sciences, announced in Darjaven Vestnik No. 40 of 16.05.2025

with a participant - Assist. Prof. Valentina Todorova Terzieva-Bogoycheva, PhD

In accordance with Order No. 151 from 14.07.2025 of the Director of the Institute of Information and Communication Technologies at the Bulgarian Academy of Sciences, I have been appointed as a member of the Scientific Jury of the competition for occupation of the academic position "Associate Professor" in the Scientific Field 4. Natural Sciences, Mathematics and Informatics, the Professional Area 4.6. Informatics and Computer Sciences, announced in the Darjaven Vestnik, Issue 40 of 16.05.2025, for the needs of the Intelligent Systems Department of the Institute of Information and Communication Technologies at the Bulgarian Academy of Sciences, with the sole participant in the competition – Assist. Prof. Valentina Todorova Terzieva-Bogoycheva, PhD.

I. General information about the applicant

Valentina Todorova Terzieva-Bogoycheva was born on December 29, 1965 in Varna. She acquired the Master's Degree in specialty Electronics and Automation, as well as a Pedagogical qualification for engineering disciplines at the Technical University - Sofia. Since 1996, she has been a member of the staff of the Institute of Computer and Communication Systems at the Bulgarian Academy of Sciences. Since 2010, with interruptions, she has held the academic position Assistant Professor at the Institute of Information and Communication Technologies at the Bulgarian Academy of Sciences. She is currently a member of the Intelligent Systems Department of the Institute of Information and Communication Technologies at the Bulgarian Academy of Sciences.

II. General characteristics of the submitted documents and works

As a member of the Scientific Jury I have received the following documents:

- 1. Order No. 151/14.07.2025 of the Director of the Institute of Information and Communication Technologies at the Bulgarian Academy of Sciences;
- 2. Application for participation in the competition by Assist. Prof. Valentina Todorova Terzieva-Bogoycheva;
 - 3. European Curriculum Vitae;
 - 4. Copy of the diploma for PhD degree;
 - 5. Certificate of internship in the specialty;
- 6. List of scientific publications, with which the applicant Assist. Prof. Valentina Todorova Terzieva-Bogoycheva, participates in the competition.
- 7. List of noted citations of Assist. Prof. Valentina Todorova Terzieva-Bogoycheva, publications for participation in the competition for the academic position "Associate Professor".
- 8. Abstracts of scientific publications, for participation in the competition for academic position "Associate Professor".

- 9. Copies of scientific publications for participation in the competition for academic position "Associate Professor".
- 10. Reference for fulfillment of the minimum national requirements under Art. 2b, # 2 and # 3 and the requirements of the Institute of Information and Communication Technologies at the Bulgarian Academy of Sciences under Art. 2b, # 5, based on the documents submitted for the competition by Assist. Prof. Valentina Todorova Terzieva-Bogoycheva.
- 11. Reference for the original scientific and applied scientific contributions of Assist. Prof. Valentina Todorova Terzieva-Bogoycheva.
- 12. Declaration that there is no proven plagiarism in the scientific works of Assist. Prof. Valentina Todorova Terzieva-Bogoycheva.

In accordance with the requirements of the Development of Academic Staff Act in the Republic of Bulgaria and the specific requirements in the Act's Institutional Regulation, the candidates for occupying the academic position of "Associate Professor" must meet the following conditions, regulated in Art. 24. (1):

- 1. Have acquired an educational and scientific PhD degree;
- 2. Have held for at least two years the academic position of Assistant Professor;
- 3. Have submitted published monographs or equivalent publications in specialized scientific publications that do not repeat the ones submitted for the PhD degree;
- 4. To comply with the minimum national requirements under Art. 2b, # 2 and # 3, respectively, of the requirements of art. 2b, # 5;
- 5. Not to have plagiarism in the scientific publications proven by the legislation order.

III. General characteristics of the applicant's scientific, applied activities

The candidate works in a very promising and current scientific field, which is a guarantee for achieving good results, with guaranteed publicity among the world scientific community.

Assist. Prof. Valentina Todorova Terzieva-Bogoycheva fulfills the requirement of Art. 24 (1) item 1 of the *Development of Academic Staff Act in the Republic of Bulgaria*, because she successfully defended a PhD Thesis's on the topic "Technological approaches for personalized learning using educational computer games", as evidenced by the diploma No. 001581/31.10.2023 for awarded PhD degree by the Institute of Information and Communication Technologies at the BAS.

Assist. Prof. Valentina Todorova Terzieva-Bogoycheva also meets the requirement of Art. 24 (1) item 2 of the *Development of Academic Staff Act in the Republic of Bulgaria*, because the official note with Ex. No. 334/06.06.2025, signed by the Director of the Institute of Information and Communication Technologies at the BAS, which certifies that the candidate has a total work experience in the specialty of 34 years and 7 months, of which 9 years and 7 months as Assistant Professor.

According to the presented author's report, Assist. Prof. Valentina Todorova Terzieva-Bogoycheva participated in the competition with nine publications, referenced and indexed in the world databases Scopus and/or WoS, which are presented as equivalent to the monograph, with one chapter of a collective monograph and twenty-three publications, which are referenced and indexed in the world databases with scientific information Scopus and/or WoS. From the analysis of the submitted publications in the competition, it follows that the reviewed publications do not repeat those submitted for the acquisition of the PhD degree, which satisfies the requirements of Art. 24 (1) item 3 of the Development of Academic Staff Act in the Republic of Bulgaria.

The results obtained in the papers submitted for the competition are entirely in the field of the competition and are related to the use of information and communication technologies and applications based on them, for various purposes in an educational context. The contributions of the submitted scientific publications are systematized in the following areas:

- 1. Information and communication technologies in the field of education;
- 2. Technological support for the education of students with specific learning difficulties (dyslexia);

- 3. Educational games;
- 4. Intelligent learning environments.

I accept the author's report for the contributions in the papers with which Assist. Prof. Valentina Todorova Terzieva-Bogoycheva participated in the competition, the results being scientific, scientifically applied and applied.

The citation report presented by Assist. Prof. Valentina Todorova Terzieva-Bogoycheva includes 266 citations in Scopus and/or WoS and 141 citations in international publications and patents. I agree that this number is at the time of submission of the competition documents and does not include newly appeared citations.

Assist. Prof. Valentina Todorova Terzieva-Bogoycheva has been a member of the team of 12 international and national research projects.

Assist. Prof. Valentina Todorova Terzieva-Bogoycheva meets the requirements of Art. 24 (1) item 4 of the *Development of Academic Staff Act in the Republic of Bulgaria*, according to the information provided for the fulfillment of the minimum national requirements and the minimum requirements of Institute of Information and Communication Technologies - BAS, by repeatedly exceeding the required minimum in indicators A, C, D, E and F for Professional Area 4.6. Informatics and Computer Sciences.

Assist. Prof. Valentina Todorova Terzieva-Bogoycheva fulfills the requirement of Art. 24 (1) item 5 of the *Development of Academic Staff Act in the Republic of Bulgaria*, because I accept the Declaration submitted by the applicant that there is no legally proven plagiarism in the scientific publications presented for this competition.

An assessment of the expertise of Assist. Prof. Valentina Todorova Terzieva-Bogoycheva is the invitation to be a lecturer at the XV National Conference on e-Education: Digital Innovations in Support of e-Education, with a presentation of a report on the topic "Use of ICT in the Educational Process According to Bulgarian Teachers - Status and Conditions", before leading state experts and scientists from various educational institutions in Bulgaria.

IV. Notes and recommendations

According to the prerequisites for reviewing the materials in the competition of Assist. Prof. Valentina Todorova Terzieva-Bogoycheva, the following notes and recommendations can be made:

- 1. To increase the number of the candidate's independent scientific papers;
- 2. To direct her potential to the management of international and national scientific research projects, for which she has an unquestionably proven capacity;
- 3. To direct her efforts to work with PhD students in order to transfer her scientific experience to the next generation of Bulgarian researchers in the field of information and communication technologies.

V. Personal impressions of the candidate

I know the candidate for this competition, Assist. Prof. Valentina Todorova Terzieva-Bogoycheva, PhD and I believe that she is a well-rounded researcher with the necessary knowledge and skills to hold the academic position "Associate Professor".

VI. Conclusion

In conclusion, I agree that the requirements of the Law for the Development of Academic Staff Act in the Republic of Bulgaria and the specific requirements in the Act's Institutional Regulations for its implementation, the Rules for the conditions and the order for acquiring academic degrees and for the occupation of academic positions in the Bulgarian Academy of Sciences, and the Rules for the specific conditions for acquisition of academic degrees and occupation of academic positions in the Institute of Information and Communication Technologies at the Bulgarian Academy of Sciences are accomplished. After getting acquainted with the materials submitted by the applicant for the competition, I give my positive estimation about the choice of Assistant Professor Valentina Todorova Terzieva-Bogoycheva in the competition for the academic position of "Associate Professor" for the needs of the Intelligent Systems Department of the Institute of Information and Communication Technologies at the Bulgarian Academy of Sciences, in

the Scientific Field 4. Natural Sciences, Mathematics and Informatics, the Professional Area 4.6. Informatics and Computer Sciences.

I propose that the Scientific Jury unanimously vote for a proposal to the Scientific Council of the Institute of Information and Communication Technologies at the Bulgarian Academy of Sciences, to elect Assistant Professor Valentina Todorova Terzieva-Bogoycheva for the academic position of Associate Professor in the Scientific Field 4. Natural Sciences, Mathematics and Informatics, the Professional Area 4.6. Informatics and Computer Sciences.

15.08.2025

Sofia

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Signature: 3311

/Corr. Memi

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