

## OPINION

under the competition for the academic position of "Assoc. Prof." in the professional field  
4.6. Informatics and Computer Science, specialty "Informatics",

announced in SG No. 40/16.05.2025

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

Member of the scientific jury: Professor Tatyana Atanasova, PhD

By Order No. 151/14.07.2025 of the Director of IICT-BAS, Corresponding Member Sv. Margenov, issued on the basis of a decision of the Scientific Council of IICT (Minutes No. 6 of 25.06.2025), in accordance with Article 4, paragraph 2 of the Act on the Development of the Academic Staff of the Republic of Bulgaria and Article 2(2) of the Regulations for the Implementation of the Act on the Development of the Academic Staff of the Republic of Bulgaria, I am appointed as a member of the Scientific Jury of the competition announced in State Gazette No. 40/16.05.2025 for the academic position of "Associate Professor" in the professional field 4.6. Informatics and Computer Science, specialty "Informatics" for the needs of the Department of Intelligent Systems at IICT-BAS. Only one candidate has submitted documents for participation in the competition – Assist. Professor Valentina Todorova Terzieva-Bogoycheva, PhD.

### **1. General description of the submitted materials**

Assist. Professor Valentina Todorova Terzieva-Bogoycheva e has submitted materials for participation in the competition in accordance with Article 24 of the Act on the Development of Academic Staff in the Republic of Bulgaria. Academic Staff Development Act in the Republic of Bulgaria, Article 53 of the Regulations for the Implementation of the Law on the Development of the Academic Staff in the Republic of Bulgaria and Art. 10 (1) of the Regulations on the specific conditions for acquiring scientific degrees and occupying academic positions at IICT-BAS.

The submitted documents for participation in the competition include a CV according to the European standard; a copy of diploma No. 001581/31.10.2023 for the educational and scientific degree "doctor"; a certificate of experience in the specialty (34 years and 7 months, of which 9 years and 7 months as a chief assistant); a list of scientific publications for participation in the competition; a list of citations in WoS or Scopus; a list of citations in other international publications; summaries of scientific publications for participation in the competition - in Bulgarian and English; copies of the scientific publications for participation

in the competition in full text; a certificate of fulfillment of the minimum requirements of IICT; a certificate of fulfillment of the minimum requirements of NACID; a reference for original scientific and applied scientific contributions; a declaration that there is no plagiarism proven in accordance with the statutory procedure in scientific works; information about work on projects; a list of publications indexed in WoS, Scopus; a list of publications not indexed in WoS, Scopus, ERIH+ or other profiled DBs.

## **2. Main scientific and applied scientific contributions**

Assis. Prof. Valentina Terzieva-Bogoycheva presented 33 scientific publications in connection with participation in a competition for the academic position of "associate professor". Publication Г 15 is repeated in those presented for the acquisition of the educational and scientific degree of "doctor"; I exclude it from consideration for participation in this competition.

The information references under Art. 53, para. 3 of the Regulations for the Implementation of the Act on the Development of the Academic Staff of the Republic of Bulgaria are performed with exceeding. A list of 266 citations in Wos or Scopus for the period 2009 – 2025 is presented.

The main thematic direction that summarizes the presented works is the use of information and communication technologies (ICT) for various purposes in an educational context. The articles outside the list of those necessary to fulfil the minimum national requirements align with the main thematic scope of Assist. Prof. Dr. Valentina Terzieva-Bogoycheva's research.

The contributions in the publications submitted for participation in the competition can be briefly formulated as:

- Systematic study of the multifaceted application of information and communication technologies in the field of education,
- Models and technological solutions for implementing a personalized learning process,
- Conceptual model of a development environment for delivering personalized e-learning,
- Architectural framework for developing a personalized e-learning environment,
- Application of mathematical approaches to evaluate the utility function when using ICT tools in the educational process,
- Technological support for the education of students with dyslexia,
- An approach to personalizing educational games,
- Modeling and building an intelligent learning environment.



### 3. Importance of contributions to science and practice

The quantitative indicators of the criteria for occupying the academic position of "associate professor", defined in the relevant legal provisions, have been met. The number of points of scientific publications presented in the report for fulfilling the minimum requirements of ICT-BAS in groups B, Г and Д exceeds the required number. The scientific production proposed for participation in the competition shows a significant scientific contribution of Assistant Professor Dr. Valentina Terzieva-Bogoycheva on the topic of the competition in her professional field of using ICT in the educational process.

The publications published in recent years in prestigious international journals, indexed in the world's scientometric databases, undoubtedly demonstrate the candidate's abilities to conduct scientific research in modern areas of information technology development. The Scopus reference for Assist. Prof. Dr. Valentina Terzieva-Bogoycheva shows 50 documents indexed in this scientometric database, with an *h-index* without self-citations of 6 with 182 citations. A serious number of citations in Scopus and Wos is a clear assessment of the candidate's recognition among scientific circles.

### 4. Critical notes and recommendations

I recommend that Assist. Prof. Dr. Valentina Terzieva-Bogoycheva continue her research in her chosen field of technologically assisted educational processes, taking into account the rapid development of information and communication technologies and artificial intelligence, with attention to the digitally born generations.

### Conclusion

My assessment of the scientific and applied research activities of Assist Prof Dr. Valentina Terzieva-Bogoycheva is definitely **positive**. I believe that the requirements of the Act on the Development of the Academic Staff of the Republic of Bulgaria, as well as the relevant Regulations for the Implementation of the Act on the Development of the Academic Staff of the Republic of Bulgaria, of the Bulgarian Academy of Sciences and of the Institute of ICT-BAS, have been met. The above gives me reason to propose to the esteemed scientific jury to vote on a proposal to the Scientific Council of the Institute of ICT-BAS to elect Assistant Professor Dr. Valentina Terzieva-Bogoycheva to the academic position of "Associate Professor" in the professional field 4.6. Informatics and Computer Sciences, specialty "Informatics".

**Date: 24.07.2025 г.**

