

## POSITION

from Dr. Radoslav Dimov Pavlov, Professor at the Institute of Mathematics and Informatics, Bulgarian Academy of Sciences, as a member of the scientific jury of the competition, according to Order № 41/09.02.2024 of the Director of ИИСТ-БАС for a competition for occupation of the academic position “Professor”

in the field of higher education:	4. Natural sciences, Mathematics and Informatics
professional field:	4.6. Informatics and Computer Science
scientific specialty:	Informatics
published in:	State Gazette No 103/12.12.2023 and on the ИИСТ website
for the needs of:	Institute of Information and Communication Technologies, Bulgarian Academy of Sciences (ИИСТ-БАС), Information Processes and Decision Support Systems Department

Only one candidate has submitted documents for participation in the announced competition:

**Assoc. Prof. Tatiana Vladimirovna Atanasova, PhD, ИИСТ-БАС**

### I. General description of the submitted materials

#### 1. Details of the application

For participation in the competition Assoc. Prof. Tatiana Atanasova, PhD has submitted 20 (out of a total of more than 160 titles) publications in English, of which 1 is independent, the publications with one co-author are 13 and with two co-authors are 5 and 1 with more co-authors. The publications submitted for review are grouped as follows: journal articles - 5, chapters in collective collections - 4, papers in proceedings of international scientific conferences - 11. Of the publications, 4 are in journals with WoS impact factor and 14 are in SJR (Scopus) journals. All the publications submitted for the competition are in the field of computer science and computer science.

I accept for consideration all scientific publications which: 1) have not been used for the acquisition of the educational and scientific degree “Doctor” and for the academic position “Associate Professor”, 2) are relevant to the subjects of the competition and 3) meet the minimum national requirements under Art. 2b, para. 2, para. 3, and para. 5 of the Act of the Development of the Academic Personnel of the Republic of Bulgaria (ADAPRB).

To take part in the competition, the applicant has submitted: an application for admission to the competition, a professional curriculum vitae in accordance with the European Union format, a copy



of a diploma for educational and scientific degree "Doctor", a list and copies of the publications presented at the competition, a reference for original scientific and applied scientific contributions, abstracts of the publications presented at the competition in Bulgarian and in English, a list of citations presented at the competition, a certificate of internship on the subject, a reference for the fulfillment of the minimum national requirements under Art. 2b, para. 2, para. 3 and para.5 of ADAPRB, prepared on the basis of documents, submitted for the competition, a reference for teaching activity in Higher School of Telecommunications and Posts, South-West University in Blagoevgrad and Erasmus+ programme, a reference for participation in international/national projects, a declaration for absence of plagiarism in scientific works, proven according to the legal procedure.

## 2. Details of the applicant

The candidate has 39 years of professional experience working at the Institute of Information and Communication Technologies-BAS. She has received his doctoral degree in 2001 from the Higher Attestation Commission. (Diploma №27553/31.10.2001) and an academic position "Associate Professor" in 2011 in IICT-BAS. She has 20 years and 9 months of experience as an Associate Professor.

## 3. General characteristics of the scientific works and achievements of the candidate

The applicant has worked and submitted publications in the following areas of the competition:

- Methods and processes for collecting, analysing, modelling and projecting information;
- Vulnerability assessment and protection of computer systems and data;
- Virtual and augmented reality (VR and AR) for training purposes.

The quantitative indicators of the criteria for the academic position "Professor" have been met – *in general, according to ADAPRB, and in particular according to the Rules for the conditions and the order for acquiring scientific degrees and for occupying academic positions at IICT-BAS, Art.3, Table of the minimum points required, by groups of indicators for different degrees and academic positions, field of higher education: 4. Natural sciences, Mathematics and Informatics, professional fields: 4.6. Informatics and Computer Science, in particular:*

- **3 publications with a total of 110 points** (100 points required) in Group "B";
- **17 publications with a total of 322 points** (260 points required) in Group "Г";
- **67 citations with a total of 402 points** (140 points required) in Group "Д";
- **Total of 420 points** (150 points required) in Group "E", Certified with: supervision of 4 successfully defended PhD students; participation in 3 national scientific or educational projects; participation in 2 international scientific or educational projects; supervision of 3 national scientific or educational projects.

No plagiarism has been established in the scientific papers submitted at the competition.

## 4. Characteristics and evaluation of teaching, project work and other activities

Teaching and pedagogical activities mostly include lecture activities at universities in Bulgaria (at the Higher School of Telecommunications and Posts, Southwest University in Blagoevgrad) and



abroad under the ERASMUS+ project. The candidate is a supervisor of 4 successfully defended PhD students.

The candidate has managed or participated in 8 national or international research projects.

### **5. Analysis of the scientific and applied research of the candidate, contained in the materials for participation in the competition**

The candidate's scientific works are on the topic of the competition, in renowned scientific conferences or scientific journals. The main focus of the scientific works is related to the research, development and application of methods and processes for collecting, storing, processing, transmitting, analysing and evaluating information using computer technology. I would like to mention in particular the scientific contributions of the candidate in the development of a set of methods for collecting, organizing and grouping data from heterogeneous sources on the Internet according to predefined rules and user requirements. The set of methods encompasses different approaches to process data from multiple sources according to heterogeneous goals: sensing, data analysis and machine self-learning. On this basis, a number of scientific and applied contributions have been realized in the field of IoT.

The candidate's participation in numerous international research projects makes him a sufficiently recognizable scientist, which is confirmed by the number of citations of his publications. This conclusively confirms that the candidate is an internationally recognized scientist whose scientific achievements are known, significant and cited.

### **6. Critical remarks and recommendations**

I have no critical remarks on the peer-reviewed works and activities of the candidate, as well as on the future use of the scientific and applied contributions of the candidate.

### **7. Conclusion for this application**

Having reviewed the materials and scientific papers submitted to the competition and based on the analysis of their significance and the scientific and applied contributions contained within them, **I confirm** that the scientific achievements meet the requirements of the ADAPRB, the Rules of its implementation, the Rules for the conditions and the order for acquiring scientific degrees and for occupying academic positions in BAS and IICT-BAS. No plagiarism has been established in the scientific papers submitted at the competition.

I give a **positive assessment** of the application of Assoc. Prof. Tatiana Vladimirovna Atanasova, PhD.

## **II. Overall conclusion**

After getting acquainted with the scientific papers and materials presented in the competition, analyzing their significance and the scientific and applied contributions contained in them, I find it

reasonable to give my positive assessment and to **recommend the scientific jury to vote on a proposal to the Scientific Council of ICT-BAS to select Assoc. Prof. Tatiana Vladimirovna Atanasova, PhD to take the academic position of "Professor"** in the field of higher education 4. Natural sciences, Mathematics and Informatics, professional field 4.6. Informatics and Computer Science, scientific specialty Informatics.

18.03.2024

**Member of the Scientific Juree:**

НА ОСНОВАНИИ

331А