

# Opinion

**in a competition for the academic position of Professor at New Bulgarian University, Sofia**

**in the field of higher education 4. "Natural sciences, mathematics and informatics",  
professional field 4.6. "Informatics and Computer Science"**

**announced in SG no. 65/12.08.2022**

**With a single candidate Assoc. Prof. D-r. Velina Todorova Slavova**

**Reviewer : prof. D-r Radoslav D. Yoshinov**

In connection with the competition procedure at New Bulgarian University, Sofia for the academic position "Professor" in "Informatics", in the field of higher education 4. "Natural Sciences, Mathematics and Informatics", professional field 4.6 "Informatics and Computer Science", announced in the State Gazette No. 65/12.08.2022, I was appointed a member of the scientific jury by an order of the Rector of NBU.

Prof. Dr. Velina Todorova Slavova, PhD, has submitted documents to participate in the competition for occupying the academic position "**Professor**" professionally 4.6 "Informatics and Computer Science", specialty "Informatics".

As a member of the Scientific Jury, I have received all the required documents for the competition in electronic form. I have been selected to prepare an opinion on the procedure of the first meeting of the scientific jury.

Candidates for the academic position of "professor" must meet the requirements described in the Law **on the Development of Academic Staff in the Republic of Bulgaria (ZRASRB) of Art. 24 (1)**, the Regulations for the Implementation of the Law on Implementation of the Law on Academic Staff in the NBU.

The candidate Assoc. Dr. Velina Todorova Slavova holds the educational degree "Doctor" since 1989. In 2003 she acquired the academic position "Associate Professor" in Informatics, awarded by the Higher Attestation Commission.

According to the provided documents and certificates of work experience, the applicant Assoc. Dr. Velina Todorova Slavova has more than 3 years of experience in the position of "Associate Professor" and has been a lecturer for more than 20 years.

Table showing minimum number of points and completed number of points by groups of indicators by the candidate Assoc. Dr. Velina Todorova Slavova of the points required by the ZRASRB by groups of indicators for Acad. Position "Professor":

Group of indicators	Indicators		Professor Minimum number of points	Completed number of points
And	Indicator 1		50	50
Would	Indicator 2		0	0
In	Indicators 3 or 4		100	100
G	Sum of indicators from 5 to 9		200	228
D	Sum of indicators from 10 to 12		100	105
Is	Sum of indicators from 13 to 20		150	190
F	Sum of indicators from 21 to the end (mandatory for NBU)		70	115
With			70	80
And			70	100

All this proves that the candidate Assoc. Dr. Velina Todorova Slavova fulfills (exceeds) all the requirements of art. 24(1) of the ZRASRB.

### **Brief biographical details of the candidate.**

Velina Todorova Slavova graduated in Mechanical Engineering from the Higher Mechanical and Electrical Institute, Sofia in 1982 (Now Technical University-Sofia). In 1984 she completed postgraduate studies in applied mathematics and informatics at the Center for Applied Mathematics at the same higher engineering school. In 1989 she acquired the scientific and educational degree "Candidate of Technical Sciences" by defending a dissertation in the field of mathematical modeling of mechanical structures. In 1994 she started working at New Bulgarian University, where in 1996 she was appointed to a permanent position as Chief Assistant. In 2003 she acquired the academic position "Associate Professor" in Informatics, awarded by the Higher Attestation Commission. She currently works as an associate professor of informatics at NBU.

### **General description of the submitted materials for the competition.**

The extended list of scientific works of the candidate includes more than 50 titles, including:

-1 монография, Velina Slavova, "Language, concept formation and child language acquisition – an information modeling approach", Professor Marin Drinov Academic Publishing House of the Bulgarian Academy of Sciences, Sofia, 2022, ISBN–978–619–245–221–6.

-8 Scientific publications in editions that are referenced and indexed in world-famous databases of scientific information (Web of Science and Scopus).

According to the presented author's reference, Assoc. Dr. Velina Todorova Slavova participated in the competition with nine scientific papers. Including:

- a monograph [1],
- eight scientific publications referenced in Web of Science and/or Scopus

Presented by Assoc. Dr. Velina Todorova Slavova reference for citations in scientific journals, monographs, collective volumes and patents, referenced in world-famous databases of scientific information (Web of Science and Scopus) - 11. Two citations are in IEEE Xplore and 2 in ACM. There are also those that are not presented for participation in the competition, as they are in editions and monographs that are not referenced and indexed in world-famous databases of scientific information.

The submitted materials for the competition do not repeat others used in the procedures for acquiring educational and scientific degree "Doctor" or Assoc. Prof.. I have not noticed plagiarism in the presented materials.

### **Scientific results and contributions.**

According to their content, the scientific works submitted for participation in the competition can be classified in the following scientific fields:

- **Analyses of current scientific research and results in the cognitive and artificial intelligence fields related to the recognition of emotions from speech and facial images.**
- **Research on new possible applications of information technology, with a positive result in the field of cognitive sciences.**
- **Research in the field of artificial intelligence for modeling, formalization and empirical verification of elements of complex cognitive processes related to language and those related to emotions.**
- **A model for information processing by forming a concept for the optimization of technological and work processes in natural languages.**
- **Specification of software solution needs, design, modeling, development, implementation and accompanying of effective software products and systems in the field of revealing emotional valence in communication.**

The reviewer accepts the candidate's contributions thus formulated.

### **Lecture work, participation in scientific projects and organization of scientific forums**

The candidate has led courses in the fields of algorithms and structures, algorithm analysis by complexity, design of relational bases, numerical methods and natural language operation, etc.

The lecture courses are accompanied by texts, author's animations, author's video presentations and carefully composed sets of author's tasks and assignments for self-preparation on each topic.

The candidate is co-chair of three international conferences in the field of artificial intelligence. He is a member of the Regional Commission of Experts of the Francophone University Agency.

### **Critical remarks.**

The very good organization and good quality of the candidate's materials are impressive, both in terms of content and shaping.

The reviewer accepts the distribution of publications along the thematic areas related to research and formal modeling of cognitive processes, although they spill over into each other and a clear line between them cannot be drawn.

The presented documents show that the applicant has already proven his capabilities for teamwork (participant in international, national and university projects and teams).

### **Conclusion**

The requirements, conditions and criteria of the Law on the Development of Academic Staff in the Republic of Bulgaria (RASRB), the Regulations for the Implementation of the Law on the Development of the Academic Staff in the Republic of Bulgaria (RASRB), for occupying the academic position of "Professor" are met and I give a definite **positive conclusion** for the election of Assoc. prof. dr. Velina Todorova Slavova

**Expressing a positive opinion on the presented materials, I propose to the venerable Scientific Jury to unanimously prepare a proposal to the Faculty of the Bachelor's Faculty of New Bulgarian University, Sofia for the selection of Assoc. Prof. Dr. Velina Todorova Slavova to the academic position of "Professor" in the professional field 4.6 Informatics and Computer Science.**

Reviewer:

Radoslav Yoshinov

29.11.2022