# O P I N I O N

by Prof. Dr. Ivan Ganchev Garvanov
University of Library Studies and Information Technologies,
member of the scientific jury according to
Order Z-RK-155 / 29.04.2021 of the Rector of NBU,
in a competition for the academic position "**professor**" in the field of higher education 4. "Natural Sciences, Mathematics and Informatics", professional field 4.6 "Informatics and Computer Science", published in press № 23 / 19.03.2021
with sole candidate **Assoc. Prof. PhD Georgi Teoharov Tuparov**

## I. BIOGRAPHY OF THE CANDIDATE

Assoc. Prof. PhD Georgi Teoharov Tuparov was born on December 28, 1963. He obtained a master's degree in "Automation of discrete production" at the Technical University of Sofia in 1989 with diploma number 020051. In 2004 he received the educational and scientific degree "Doctor" from the Higher Attestation Commission with diploma number 29294. In 2007 he received from the Higher Attestation Commission a certificate with number 24071 for associate professor in scientific specialty 01.02.12 Informatics. Since 2016 he has held the academic position of "Associate Professor" at the New Bulgarian University, Sofia.

## II. MINIMUM NATIONAL REQUIREMENTS

Assoc. Prof. PhD Georgi Tuparov presented 23 publications for participation in the competition, of which 1 monograph, 1 chapter of a book, 21 publications indexed in Scopus, Clarivate Analytics Web of Science, ACM Digital Library and IEEE eXplore Digital Library.

According to Art. 29 of the LRA of the Republic of Bulgaria, Art. 61 of PPZRAS and Art. 64 of the Ordinance on RAS of NBU, the candidates for the academic position "professor" are evaluated according to the fulfillment of the conditions under art. 60, para. 1 and 2 and in accordance with the information from the inquiries under art. 60, para. 3.

According to Art. 60, para. 1 (1) to have acquired an educational and scientific degree "Doctor", a Diploma for ONS Doctor No. 29294 dated 23.08.2004 has been issued, issued by the Higher Attestation Commission.

According to Art. 60, para. 1 (2) the academic position of "associate professor" has been held in the same or in another higher school or scientific organization not less than two academic years or not less than five years an autobiography is presented, Certificate for the scientific title "associate professor" No 24071 of 05.02.2007, issued by the Higher Attestation Commission, as well as a list of courses taught at NBU.

According to Art. 60, para. 3 The applicant shall submit a reference for fulfillment of the minimum national requirements, of the requirements under art. 1a, para. 2, as well as a reference for the original scientific contributions, to which the respective evidences are attached, the candidate has submitted a reference for fulfillment of the minimum national requirements and an Author's reference for the publications and the contributions.

The fulfillment of the minimum national requirements for the groups of indicators for the academic position “professor”, according to the specific requirements of NBU, is as follows:

For group "A" the candidate has submitted a reference from NACID for proving the educational and scientific degree "Doctor" - 50 points.

For group "B" the candidate has submitted a monograph with 146 pages - 100 volumes.

For group "D" the sum of the indicators from 5 to 10 forms a total of 489 points of the required 200 points.

For group "D" the sum of the points is 856 at the required 100 points.

For group "E" the sum of the indicators from 12 to 20 forms a total of 498.5 points from the required 150 points.

For group "G" evidence is presented for 145 points with a required 70 points.

For group "H" evidence is presented for 80 points with a required 70 points.

For group "I" the candidate has presented evidence for 70 points of the required 70 points.

From the analysis made in this way, it was established that the evidence presented by Assoc. Prof. Dr. Georgi Tuparov significantly exceeds the set minimum national requirements and the requirements of the New Bulgarian University.

Upon reference on 14.07.2021 for the scientometric indicators of the candidate in Scopus, Web of Science and Google Scholar, the following was established:

The number of publications in Scopus is 20, the number of citations is 42 and the h-index is 5.

The number of publications in WoS is 18, the number of citations is 35 and the h-index is 4.

The number of citations in Google Scholar is 271 and the h-index is 10.

In the report to cover the scientometric indicators, the candidate also presented citations in publications indexed in Scopus and Web of Science of publications that are not indexed in these two systems. These citations are not taken into account when calculating the h-index, but are valid for scientometrics. I should also note that the publications in Group D (10, 11, 12, 14 and 15) are in publications that currently have an SJR in Scopus.

The presence and maintenance of professional profiles in: orcid.org/0000-0003-4162-5106 and researchgate.net/profile/Georgi-Tuparov makes a very good impression.

From the presented reports it can be seen that the teaching activity of Assoc. Prof. Dr. Georgi Tuparov includes courses directly corresponding to the topic of the announced competition.

**III. CONTRIBUTIONS**

The contributions presented by Assoc. Prof. Dr. Georgi Teoharov Tuparov are systematized in the following main areas:

1. Modeling and development of sustainable extensions of the functionalities of open source e-learning systems. Contributions in publications related to this area focus on the analysis of various approaches, including e-learning standards and specifications, and identify opportunities for their use to expand the functionality of open source e-learning systems [4, 6, 10, 11, 23]. Models and approaches have been created for: 1) a model for the implementation of the "file" method [1, 2] and modules for assessment of competencies in blog and wiki [6] as sustainable micro-extensions of the functionality of the open source e-learning system Moodle using built-in expansion mechanisms; 2) approach to the use of e-learning standards and specifications for the development of sustainable micro-extensions of the functionality of open source e-learning systems - development of simulations and educational games [5, 10, 11, 16, 23]; 3) approaches and models for micro-extensions by adapting an existing technological tool or resource of the e-learning system by changing the semantics and / or usage [23]. The proposed models and approaches have been implemented, which has proven their viability and effectiveness [1, 2, 3, 4, 5, 6, 16, 23].

2. Framework for description and evaluation of functionalities of e-learning environments. Comparative analyzes. Frameworks have been developed to study various aspects of the functionality of open source e-learning systems and comparative analyzes of some of the most common e-learning systems have been made, concerning: 1) competence assessment [6]; 2) opportunities for integration of game elements and educational games in open source e-learning systems [10, 11]; 3) characteristics of e-learning tools [23].

3. Educational computer games and gamification. Prototypes of educational games have been created, reflected in [11, 16, 21, 23]; a model for generating test tasks using game elements has been implemented [17, 18]; and a technology for self-preparation and self-assessment of students using gamification has been developed [20, 23].

4. Mobile training - analysis, modeling and implementation in countries in conditions of military conflict. Based on a survey conducted among e-learning stakeholders at some of the universities in the Republic of Yemen: 1) the

technological challenges to mobile learning regarding the unstable communication environment in the context of military conflict have been identified [8]; 2) the risks of using different learning materials provided electronically in relation to the end devices used are assessed and the cultural features of the learning environment are assessed [9]; 3) The FRAME model for mobile learning has been expanded and adapted and a technological model for the implementation of mobile learning with a pilot study in the Republic of Yemen has been developed [13].

5. Research of stakeholders in the e-learning ecosystem. Questionnaires have been created, tested and validated to study various aspects of the interaction of stakeholders in the e-learning ecosystem both with the technological means in it and with other stakeholders, identifying: 1) the necessary new functionalities of the technological means of the ecosystem for e-learning and in particular for e-learning systems, which are at least for now the core of this ecosystem [3, 7]; 2) the end devices used by the learners and determining the specifics of the learning materials used through them [8, 9]; 3) game elements and mechanics preferred by learners and trainers [12, 14, 16, 19].

6. Development of e-learning. An analysis and systematization of the state, problems, trends and opportunities for the development of e-learning in general and in particular - in Bulgaria and in the Republic of Yemen, both in terms of technology and in terms of policies for process management in e-learning and distance learning. [13, 22, 23]. The evolution of Web technologies and their impact on e-learning has been traced [23].

**IV. CRITICAL REMARCS AND RECOMMENDATIONS**

I would like to recommend Assoc. Prof. Dr. Georgi Tuparov to work more with doctoral students in the future in order to pass on the knowledge and skills he has accumulated to the next generations of young scientists.

**V. CONCLUSION**

Based on the prominent scientific contributions of the candidate, as well as the fact that he meets all the requirements and criteria of ZRASRB, PPZRASRB and the Ordinance on the development of the academic staff of NBU, I give a completely positive assessment of the election of Assoc. Prof. Dr. Georgi Teoharov Tuparov for the academic position "Professor" in the professional field 4.6 "Informatics and Computer Science".

I propose to the esteemed Scientific Jury to support the candidate and to vote on a proposal to the Academic Council of New Bulgarian University to elect Assoc. Prof. Dr. Georgi Teoharov Tuparov to the academic position of "Professor" in professional field 4.6 "Informatics and Computer Science".

Date: 16.07.2021. Reviewer: .....

Prof. DSc. Ivan Garvanov