<div align="center">**REPORT**</div>

by Prof. DSc **Ivan Nikolov Landjev**, New Bulgarian University

in the competition for the scientific position of **"professor"** in New Bulgarian University

Scientific Field: **4. Natural Sciences, Mathematics and Informatics,**
Professional Field: **4.6. Informatics and Computer Science**

announced in **"Darzhaven vestnik" No 23/19.03.3021**

Candidate: **Assoc. Prof. Georgi Teoharov Tuparov**

I. Fulfillment of the minimal national requirements and the requirements of the New Bulgarian University

 The documents related to this call contain an information sheet giving evidence for the fulfillment of the national requirements described in the corresponding material Law and the special requirements of the New Bulgarian University for the position of full professor. I agree with the presented data from which it becomes clear that the candidate fulfills completely the above mentioned requirements. For instance, in group G he presents 22 publications giving 498 points, whereas the requirement is 200 points; In group D he gives 107 citations amounting to 856 points, whereas the requirement is 100 points and so on. The fact that the candidate applies for the position with a far larger scientific production than required by the law and the corresponding regulations crates a most favorable impression.

 The presented papers and citations have not been used for acquiring the degree "doctor" or in other previous applications of the candidate.

II. Research activities

1. The habilitation text "Electronic education. Development and stability of systems for e-education in open code" contains 145 pages of text; the list of references contains 223 titles. The main focus of this book is on the development of stable extensions of systems for electronic education in open code. The popularity of this subject has grown immensely in the last two years due to the pandemic situation all over the world.

 The book is structured in four chapters. In chapter 1 the author makes an analysis of the existing systems for electronic education. In chapter 2 the author considers the development of the electronic education in Bulgaria and abroad. The author considers also the impact on the electronic education caused by the development of the web-technologies. In chapter 3 the author provides an analysis of the possibilities for stable development of the functionality of the systems for electronic education. Moreover, the author suggests several approaches for the development of stable extensions of systems for e-education. Chapter 4 contains several practical applications. This book generalizes and systematizes the long-term investigations by Georgi Tuparov in the area of the systems for e-education. The book was met with positive reviews by the specialists in the field.

The investigations related to the publications can be partitioned in several subjects that are all very important and very up-to-date. They include: (1) modeling and development of stable extensions of the functionalities of systems for electronic education with open code; (2) comparative analysis for different media for electronic education; (3) problems of the gamification and creation of educational computer games; (4) problems of the mobile education related to education systems in an unstable communication environment; (5) problems of the electronic education in the context of the evolution of the technologies.

The contributions of the candidate with this book can be attributed in a larger degree to the applications than to the theory.

2. The main contribution in a major part of the publications are in the area of the investigation, modeling and development of extensions of systems for e-learning. In them the candidate makes an analysis of such systems and points out possibilities for their future extension and development. Furthermore, he investigates possibilities for such systems to measure the acquirement of competences, as well as to integrate in them of game elements and educational games, which is known as gamification. A small group of papers deals with the so-called mobile education, or education under the conditions of an unstable communication environment. These are obviously the papers with his PhD student.

All publications presented by the candidate are indexed in one or more of the following: Web of Science, Scopus or IEEE Xplore. Thirteen of the presented papers have an SJR-index.

3. The candidate provides an impressive list of 107 citations of his scientific papers. This shows that his scientific output is well-known and highly valued in the circle of the researchers dealing with computer systems for e-learning. The candidate includes only citations that are indexed in the most well-known databases admitted in the law and the related regulations: Web of Science, Scopus, IEEE Xplore.

4. The candidate provides a list of nine national and five international projects in which he took part in the period 2005-2021. One of these projects is still active. All these projects are educational projects and are related to different sides of the development of systems for e-learning. At present, Georgi Tuparov is the coordinator of one project supported by the Bulgarian National Science Foundation entitled "Pedagogical and educational aspects of the computer educational games". The members of the team working on this project include also two students from the New Bulgarian University.

Most of the aforementioned projects are supported financially by the Bulgarian National Science Foundation and by the Ministry of Science and Education. The total value of the projects exceeds 1000000 BGN. Although this sum is taken into account in the evaluation of the candidates, I find it irrelevant. All in all, the candidate gives enough evidence for extensive project activities.

There is one PhD student that obtained his doctor degree under the supervision of Georgi Tuparov in the South-west University, Blagoevgrad, in 2017. The title of the thesis is "A technological model for mobile learning in the Republic of Yemen".

III. Teaching activities

Georgi Tuparov is very active as a teacher covering a large spectrum of courses in the New Bulgarian University, as well as in the South-west University, Blagoevgrad, before 2016. I would stress here fundamental courses like "Distributed data-bases" taught in English in the program "Network technologies", "Data bases and SQL" in programs "Informatics" and "Information technology", "Modelling with UML" and "Information systems client-server" in programs in programs "Informatics" and "Information technology", and many others. As rule, his courses are attended by a large number of students. Assoc. Prof. Tuparov is actively engaged with the master program "Software Technologies in Internet" at department "Informatics". As a whole, his teaching load exceeds the average of a teacher at the New Bulgarian University.

Assoc. Prof Georgi Tuparov has developed the teaching material in three important disciplines: "Modeling with UML", "Information systems client-server", and "Data bases and SQL". In addition, he is very active in supervising diploma theses of student from all programs in department "Informatics", in writing reviews for diploma theses, supervising student projects, in taking part in various scientific juries and panels for state exams.

It should be noted in this point hs work on writing textbooks in informatics and information technology for the primary and the secondary school. This can be viewed as an active advertising of the New Bulgarian University as a high school.

IV. Administartive and community activities

Assoc. Prof. Tuparov is chair of the permanent commission at the Library of the New Bulgarian University. He took part in many of the activities of the Library of NBU.

In the period 2016-2021 Assoc. Prof. Tuparov took part in fourteen panels most of which (13) are in the professional filed 4.6 Informatics and Computer science. Georgi Tuparov acted as an expert on many panels of The Ministry of Education and Science working on the development of teaching programs for the secondary school.

V. Personal comments

I have known Georgi Tuparov for ten years. He is with the department of Informatics at the New Bulgarian University since 2016. I have the most favorable opinion of his professional capabilities and his commitment to the teaching and research activities in the department. In addition, all the application documents are excellently prepared and very handy to work with.

VI. Critical remarks

I would refrain from critical remarks and suggestions for future work. At this level the candidates have a very clear idea for their research and publication activities. The standard remark here is to suggest publication in journals of high impact. But this depends clearly on the research area in which the candidate is working.

Conclusion

Georgi Teoharov Tuparov is an established specialist in the area of information technology and especially in the area of the systems for e-learning. During the years he has been the author of a large amount of scientific papers which are highly valued internationally. He is actively engaged in with extensive teaching activities mainly in the New Bulgarian University where he is the author and leading teacher of many courses. He was the supervisor of many diploma theses, the author of many textbook on information technology, mainly for the secondary education, and has served on various juries and panels. A plagiarism of any kind could not be established.

In my opinion, the candidate fulfills all requirements of the Bulgarian Law for the promotion of the academic staff, as well as the special requirements of the New Bulgarian University. I estimate **positively** the application of Assoc. Prof. Georgi Teoharov Tuparov and advise this Scientific Jury to propose the candidate to the Academic Council of the New Bulgarian University where he should be voted for the academic position of full professor in the scientific field: 4. Natural Sciences, Mathematics and Informatics, professional field: 4.6. Informatics and Computer Science.

Sofia, 18.07.2021   Signature …………….