

Review

**in a competition for the academic position "Professor"
at the Faculty of Economics, Sofia University "St. Kliment Ohridski"
in professional field 4.6 "Informatics and Computer Science",
specialty "Informatics"
(eGovernment and eBusiness),
with a single participant Assoc. Prof. Dr. Kamen Boyanov Spasov
Reviewer: prof. Dr. Radoslav Dakov Yoshinov**

In connection with the competition procedure at Sofia University "St. Kliment Ohridski", Faculty of Economics for the academic position 'professor' announced in the State Gazette, issue 1. 86/13.10.2023 for the needs of the Faculty of Economics of Sofia University in the field of higher education 4. Natural sciences, mathematics and informatics, professional field 4.6. Informatics and Computer Science (e-Government and e-Business) and on the grounds of Order RD 38-622/20.11.2023 of the Rector of Sofia University "St. Kliment Ohridski" and the provision of art. 29 of the Law on the Development of Academic Staff in the Republic of Bulgaria, Decree No 26 of 19 February 2019, the Regulations on the Specific Conditions for Academic Position at Sofia University - I have been appointed a member of the scientific jury.

Assoc. Prof. Dr. Kamen Boyanov Spasov from Sofia University has submitted documents to participate in the competition for the academic position "Professor" professional field 4.6 "Informatics and Computer Science", specialty "Informatics".

As a member of the Scientific Jury, I have received:

1. Order RD 38-622/20.11.2023 of the Rector of Sofia University "St. Kliment Ohridski"
2. Rules for the terms and conditions for acquiring scientific degrees and for occupying academic positions at Sofia University "St. Kliment Ohridski". Kliment Ohridski";
3. A copy of a Master's Degree from the Higher Institute of Chemical Technology from 1984;
4. Copy of Master Diploma from the University of South Carolina - 1999;
5. Copy of Master of Business Administration diploma from Wirdshaft universitet Wien 1999;
6. Copy of the diploma for scientific and educational degree "Doctor" from 02.1.1992 ;

7. Copy of the Associate Professor Diploma from 11.02.2009 ;
8. Certificate of work experience;
9. Creative autobiography;
10. Declaration of originality and authenticity;
11. List of all publications of Kamen Boyanov Spasov;
12. List of Kamen Boyanov Spasov's publications submitted for the competition;
13. Author's reference of Kamen Boyanov Spasov;
14. List of quotes by Kamen Boyanov Spasov;
15. Publications - photocopies;
16. Additional documents.

Note: all required documents of the competition are provided in electronic form to [https://febunisofia-my.sharepoint.com/:f:/g/personal/desi_feb_uni-sofia_bg/EkQU-](https://febunisofia-my.sharepoint.com/:f:/g/personal/desi_feb_uni-sofia_bg/EkQU-Z_4mWtMvYa7L9go5kYBsGcy9PYV35PpqqLjTnISUQ?e=Xfxi82w)

[Z_4mWtMvYa7L9go5kYBsGcy9PYV35PpqqLjTnISUQ?e=Xfxi82w](https://febunisofia-my.sharepoint.com/:f:/g/personal/desi_feb_uni-sofia_bg/EkQU-Z_4mWtMvYa7L9go5kYBsGcy9PYV35PpqqLjTnISUQ?e=Xfxi82w)

I was selected as a reviewer under the procedure of the first meeting of the scientific jury.

According to the **Law on the Development of Academic Staff in the Republic of Bulgaria (ZRASRB) - Art. 29(1)2**, the Regulations for the Implementation of the Law on the Acquisition of Scientific Degrees and for Occupying Academic Positions at Sofia University "St. Kliment Ohridski", candidates for the academic position of "professor" must meet the requirements described in Art. 63 of the PRASSU, as well as the additional requirements in PN 4.6. "Informatics and Computer Science":

1. to meet the relevant minimum national requirements and the additional faculty requirements;
2. to have acquired the PhD as for specialties of the regulated professions, it should be of the same specialty;
3. have held the academic position "Associate Professor" at the University or at another higher school or scientific organization for at least five academic years, or
4. not less than five years:
 - (a) have been lecturers, including part-time lecturers, or members of a research team at the University or at another higher education institution or scientific organisation, or

(b) have exercised artistic activity, or
(c) have been specialists in practice and have a proven track record in their field;

5. have submitted published monographic work and/or equivalent publications in specialized scientific journals (including their citations) or evidence of relevant artistic achievements in the field of arts;

6. have presented other original research works, publications, inventions and other scientific and applied scientific developments or artistic and creative achievements, which are evaluated in their totality;

7. there must be no plagiarism in scientific works proven by the statutory order.

31 (2) (new - 20.06.2011) 1, item 4 and item 5 shall not repeat others with which the candidate has participated in successful procedures for acquiring the PhD and the National Assembly Doctor of Science and for occupying the academic positions of Chief Assistant and Associate Professor – regardless of which scientific organization this has happened, as well as for holding the academic position of "Professor" at the University.

(3) If applicants have not held the academic position of Associate Professor, they must present another published monographic work or equivalent publications in specialized scientific journals or relevant evidence of artistic achievements in the field of arts, which do not repeat submitted for acquisition of NSA "Doctor" and NS "Doctor of Science".

(4) (amend. – 15.10.2018) The faculties of the University have the right to determine additional requirements that are accepted by the FS and are compulsorily deposited in the Department. When determining the additional requirements, the faculties shall take into account the established indicators for evaluation and financing of the scientific and artistic activity inherent in the state higher education institutions, as well as the indicators of the ranking system of higher education institutions in Bulgaria.

The candidate Assoc. Dr. Kamen Boyanov Spasov holds the educational degree "Doctor" since 1992, as well as has held the position of "Associate Professor" since 2009.

According to the issued by Sofia University "St. Kliment Ohridski". The applicant Kamen Boyanov Spasov has experience in the position of "Associate Professor" – from 09.06.2009, satisfying Art. 29 (1) item 2 of the Law on the Acquisition of Scientific Degrees, he has acquired the educational and scientific degree "Doctor" more than 15 years ago. (29 (1) item 1 of the Law on the Acquisition of Scientific Degrees

Table showing compliance by points with those required by the Law on the Acquisition of Scientific Degrees and Regulations of it's application in SU. Minimum required points by groups of indicators for the academic position "Professor" and their respective performance by the candidate Assoc. Prof. Dr. Kamen Boyanov Spasov:

Assoc. Prof. Dr. Kamen Boyanov Spasov, PhD on compliance with the National Minimum Requirements for Acquiring the Academic Position of Professor in 4.6. Informatics and Computer Science			
Group of indicators	Required number of points	Indicator	Points
A	50		50
		A1. Dissertation for awarding educational and scientific degree "Doctor" (50 pts.)	
B	100		216
		B1. Habilitation - scientific publications in publications that are referenced and indexed in world-famous databases with scientific information (Web of Science and Scopus))	
Г	200		327
		D7. Scientific publication in publications that are referenced and indexed in world-famous databases with scientific information (Web of Science and Scopus), outside the habilitation work	
		D8. Published chapter of a book or collective monograph	
Д	100		192
		E11. Citations in scientific publications, monographs, collective volumes and patents, referenced and indexed in world-famous databases of scientific information (Web of Science and Scopus)	
IE	100		236
		E13. Leadership of a successfully defended PhD student	
		E14. Participation in a national scientific or educational project	
		E15. Participation in an international scientific or educational project	

		E17. Leadership of the Bulgarian team in an international scientific or educational project	
		E18. Attracted funds for projects led by the applicant	
		E19. Published university textbook or textbook that is used in the school network	
		Total	1021

Assoc.Prof Dr. Kamen Boyanov Spasov fulfills the requirement of art. Art. 29 (1) item 6, having submitted a declaration for lack of plagiarism proven by the statutory order in the scientific works under the competition.

All this proves that the candidate Assoc. Prof. Dr. Kamen Boyanov Spasov fulfills (exceeds) all the requirements of Art. 29 (1) of the Law on the Acquisition of Scientific Degrees, as well as all the requirements of Art. 63 of the Regulations of it's application in SU, with the additional requirements for participation in the competition.

Brief biographical details of the candidate.

Kamen Spasov was editor-in-chief of Computer world Bulgaria (IDG) 1992-1993, deputy editor-in-chief of PC Magazine Bulgaria

Coordinator of the Coordination Center for Information, Communication and Management Technologies at the Council of Ministers (joint project with UNDP 2003 – 2004, 2006-2007)).

Associate Professor of Informatics and Computer Science since 2009 Lecturer (Honored) – E-Government, Interoperability and Information Security at the Institute of Public Administration at the Council of Ministers. Deputy Minister of Transport, Information Technology and Communications in caretaker government in charge of eGovernment 2014

Head of e-Government Laboratory at Laboratory of Computer Virology, BAS 2013-2019

He works at Sofia University FMI from 02 April 2018 to 1 March 2020.

Director of the Master Program MBA-MIS, accredited by AMBA from 2023.
Director of the Master's program "Management Information Systems" taught in English at the Faculty of Economics at Sofia University, December 2019 – 2023.

Director of the Master's program "E-Business and e-Government" at the Faculty of Mathematics and Informatics at Sofia University (2009 – 2019)). Director of the Master's program "e-Business" taught in English at the Faculty of Mathematics and Informatics at Sofia University ((2014 – 2019))

General description of the submitted materials for the competition.

For participation in a competition for "professor" the candidate Assoc. Prof. Dr. Kamen Boyanov Spasov has presented the following materials:

As a habilitation work - 7 publications, indexed in Scopus and Web of Science; 9 other publications, indexed in Scopus and Web of Science; 3 books and 2 school supplies.

From the analysis of the submitted works under the competition it follows that the peer-reviewed publications "do not repeat those submitted for acquiring the educational and scientific degree "Doctor" and for occupying the academic position of "Associate Professor", i.e. it meets the requirements of Art. 29 (1) item 3 of the RSRB.

For participation in this competition are presented 23 citations in publications indexed in Scopus and Web of Science. (According to various sources, the total number of citations of Assoc. Prof. Dr. Kamen Boyanov Spasov as of 10.12.2023 is: in Web of Science – 38; in Scopus – 72; in Researchgate – 166; in Google Scholar – 293)

Projects – evidence of participation in numerous national and international projects is presented, more than 5 of them have been the leader.

Director of project activity and knowledge exchange to project BG05M2OP001-1.001-0004 "Universities for Science, Informatics and Technologies in e-Society" (UNITe), member of the scientific group "Digitalization of SMEs", Contract BG-RRP-2.004-0008, Project "Sofia University – Marker for Innovation and Technology Transfer (SUMMIT)", from 2023 /and continues/.

The applicant is a participant in program and organizing committees of scientific events, has delivered lectures at an invitation at a number of universities, as well as

reports in international and national scientific forums. Kamen Spasov was editor-in-chief of the popular science magazines Computerworld Bulgaria (IDG) and deputy editor-in-chief of PC Magazine Bulgaria; Participant in editorial boards of scientific journals, reviewer in a number of European programs and scientific journals.

He has participated in the development of more than 5 Master's degree programmes. He has lectured at a number of universities as well as at the Institute of Public Administration.

The submitted materials for the competition do not repeat others used in the procedures for acquiring educational and scientific degree "Doctor" and for occupying academic positions "Chief Assistant" and "Associate Professor". I have not noticed plagiarism in the presented materials.

Scientific results and contributions.

The main scientific interests and the received scientific and applied contribution results, reflected in scientific publications, are divided into six thematic areas:

- Theory of eGovernment

An e-government architecture is discussed. An e-governance architecture is described, which is based on a service-oriented architecture (AOU). An architecture of structural components in the AOU is proposed. The architecture of an administrative information system (AIS) is described in detail. A Unified Environment for the Exchange of Electronic Documents has been defined. The theoretical formulations are a summary of previous publications dealing with individual statements discussed in a joint monograph by Lyubomir Blagoev and Kamen Spasov on "e-Government in Bulgaria", giving a legally regulated technological framework, presenting the theoretical foundations of e-government in Bulgaria.

- Applied aspects of eGovernment

A prototype of an integrated eHealth system has been created, which includes modules: patient record; GP; pharmacy; hospital with included hotel part; clinical laboratories.

It is shown that the system can function with a common database.

- E-government on the Internet and social networks

A survey of the presence of 264 municipalities in Bulgaria on Facebook for the period 2014 – 2016 was conducted. A specialized web-based platform for data collection and visualization has been created. A study of the websites of 203 administrative structures at central, regional and local level was made and they were assessed for compliance with the existing instruction number 4 of the MDAAR.

- Information security

Information security is a key factor in business and in building e-government. A new model demonstrating the reasons for the superiority of hackers over cyber-defenders is presented. It is based on the new proposed space for vulnerability categories. The model reveals the reason for the superiority of hackers over cybersecurity teams.

- Transport optimization

A new algorithm for calculating optimal trajectories of electric buses for fulfilling public transport requests on demand in an intelligent urban environment is presented. The algorithm has been tested with real data and submitted for implementation under the INNOAIR project. The concepts used to develop a Platform for public transport on request to optimize the route - as part of the INNOAIR project - are presented.

- Training in e-government and e-business

Hundreds of students have undergone training in Master's degree programmes in e-Business and e-Business with training in English, led by Assoc. Prof. Dr. Kamen Boyanov Spasov – Bulgarians and foreigners.

The reviewer accepts the contributions thus formulated.

Experiments and analyses of the results obtained, proving the applicability of the proposed approaches, methods and methodologies, have been made..

Educational activities, scientific projects, organization of scientific forums

As Associate Professor of Informatics and Computer Science Assoc. Prof. Dr. Kamen Boyanov Spasov performs his auditorium and extra-auditorium work above the required annual norm, lectures in the field of informatics and information technologies in bachelor's and master's degree programs.

The applicant is a participant in international, national and university projects in the field of information technology, computer security, distance learning, the creation

of software platforms for data processing and protection, virtual educational courses, etc.

He has led over 130 graduates.

He is a coordinator of national and international projects in the field of computer security, cyber security, e-government, taking into account the impact of modern ICT on e-government. The projects focus on aspects of comparability, comprehensibility, correctness and sustainability of software.

Critical remarks.

The very good organization and good quality of the candidate's materials - both in terms of content and shape. The reviewer noticed only some minor technical inconsistencies and spelling errors. All this does not diminish the large volume of research, scientific and scientific-practical work of the candidate, shaping him as an established scientist.

A pleasant impression is made by the relatively high citation in indexed publications. The reviewer accepts the distribution of the publications in the six thematic areas submitted by the candidate.

It would be good to show the influence of publications in the first three directions on more than one of these directions, as seen in their reading. This would show the interaction of these three thematic areas in their dynamics and would outline more focused the theme of the competition.

The presented documents show that the applicant has already proven his capabilities for teamwork (Deputy Minister; participant in international, national and university projects and teams - most of which he is a leader).

Conclusion

The requirements, conditions and criteria of the Law on the Development of Academic Staff in the Republic of Bulgaria, the Regulations for the Implementation of the Law on the Development of Academic Staff in the Republic of Bulgaria and the Regulations on the terms and conditions for acquiring academic degrees and for occupying academic positions at Sofia University are met. Therefore, I give a definite positive conclusion about the choice of Assoc. Prof. Dr. Kamen Boyanov Spasov in a

competition for "professor" in professional field 4.6. "Informatics and Computer Science".

Expressing a positive opinion on the presented materials, I propose that the venerable Scientific Jury unanimously vote a proposal to the Faculty of Economics of Sofia University to elect Assoc. Prof. Dr. Kamen Boyanov Spasov in the academic position "Professor" in professional field 4.6 "Informatics and Computer Science", specialty "Informatics".

.

28.12.2023

Reviewer:

Radoslav Yoshinov