O P I N I O N
by **Prof. Emilia Andonova Dimitrova, PhD**,
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of the materials submitted for participation in a competition for the academic position of "associate professor" in the field of higher education - 5. Technical sciences,
by professional direction – 5.3. Communication and computer equipment,
specialty - "Communication networks and systems"
(Communication and Computer Systems, Measurements in the Communications)

In the competition for associate professor, announced in the State Gazette, № 54/25.06.2024 and on the website of Technical University of Gabrovo for the needs of the Department of "Communications Equipment and Technologies" (CET) at Faculty of "Electrical Engineering and Electronics" (FEE), as a candidate participates Chief Assist. Dr. Eng. Georgi Ivanov Georgiev.

1. Overview of content and results in the presented works

The candidate submitted a total of 36 scientific publications, one handbook and two teaching aids under this competition. I have no posts in common with the candidate. Declarations of originality and authenticity of the submitted documents, as well as contracts for the candidate's participation in scientific research projects, are attached.

According to the RULES for the acquisition of scientific degrees and the occupation of academic positions in TU - Gabrovo (ROSD and LAS) for the occupation of AP "associate professor" in area 5. Technical sciences, it is necessary to meet the requirements for Groups of indicators: A (50 points), B (100 points), D (200 points) and D (50 points). The total number of publications should be greater than 15, with at least 4 pcs. to be independent, 1 pcs. with IF (WoS)/ SJR (Scopus). A published book and textbook are also required.

After a thorough review of the competition documents, it can be concluded that these requirements are met and the candidate's scientific research activity is entirely in the specialty of the competition:

Indicator A - 50 points: the candidate holds the ESD "Doctor" for a developed and defended dissertation on the topic "Statistical methods for identification and forecasting of parameters of traffic flows in teletraffic systems", Diploma № RU-NS-2019-14/10.09.2019. The documents for the current competition include a list of dissertation publications.

Indicator B: the candidate has submitted **10 nos.** scientific publications in publications referenced and indexed in world-renowned scientific information databases *Scopus* - Indicator **B4**: co-authored: 4 publications with 2 authors, 2 - with 3 authors, 3 - with 4 authors and 1 - with 5 authors (in 5 of in the publications the candidate is the second author, in 2 - third, in 2 - fourth, in 1 - fifth) - a total of **217** items, which significantly exceeds the requirements.

4 of the publications have impact rank SJR (Scopus) [B.4.1, B.4.4, B.4.7, B.4.9, B.4.10].

Indicator G - for participation in the competition, the candidate has submitted **26 scientific publications**, 4 of them are independent, 20 are in English and 6 - in Bulgarian. They are divided into groups as follows:

Indicator G7 – Scientific publications in publications referenced and indexed in world-renowned databases with scientific information – **14 pcs** . in co-authorship (1 issue with 2 authors, 5 issues with 3 authors, 6 issues with 4 authors and 2 issues with 5 authors). In 3 of the posts the candidate is second author, in 4 – third, in 6 – fourth, in 1 – fifth – total **162.65 p.**

1 publication has a WoS Impact Factor [G.7.1] *and* **6** *have impact rank SJR (Scopus)* [G.7.1, G.7.4, G.7.6, G.7.8, G.7.13, G.7.14] .

Indicator G8 - Scientific publications in non-refereed journals with scientific review or in edited collective works: **12 pcs.**, of which 4 are independent - reports were presented at the Scientific Conference "Knowledge, Science, Innovations, Technologies 2024" - Veliko Tarnovo (3 items .) and at the International Scientific Conference " Unitech - 2023" (1 item). The rest are co-authored: 2 publications with 2 authors, 6 – with 3 authors; in 4 of them the candidate is second author and in 4 - third **- a total of 140.02 points.**

Total number of points for Indicator G: 302.67 points, which significantly exceeds the requirements.

Indicator D - for participation in the competition, the candidate submitted <u>15 citations </u>of his publications in publications referenced and indexed in world-famous databases with scientific information: Indicator **D12 – 150** points , which exceeds the requirements.

In conclusion, I consider that the submitted materials for the competition fully satisfy the minimum national requirements and those of TU - Gabrovo for holding the academic position of "associate professor".

2. General characteristics of the applicant's activity

2.1. Educational and pedagogical activity (work with students and PHD students)

Georgi Georgiev was appointed as the main assistant at TU - Gabrovo in 2019. No certificate of classroom employment of the candidate was presented, but it is clear from the autobiographical certificate that he led lectures on disciplines from the specialty of the competition. He was the supervisor of more than 25 graduates. He has participated together with students in the development of reports and in scientific sessions. Co-author of a textbook: Balabanova I., G. Georgiev, " *Multiplex Optical Systems and Networks* ", University Press "Vasil Aprilov", 161 pages, ISBN: 978-954-683-694-6, 2023, as well as two exercise manuals: Balabanova I., G. Georgiev, " *Modelling and analysis of teletraffic processes in communications* ", University Press "Vasil Aprilov", 144 pages, ISBN: 978-954-683-9, 2020 and Balabanova I., G. Georgiev, " *Guide to Telecommunication Transmission Lines and Optical Communications* ", University Publishing House "Vasil Aprilov", 248 pages, ISBN: 978-954-608-3, 2019. Participated in 10 mobilities under the Erasmus + program for the purpose of training .

It can be concluded that the educational and pedagogical activity of the candidate is at a high professional level.

2.2. Scientific and scientific-applied activity

The candidate's active research and scientific-applied activity is mainly aimed at application of Machine Learning and Artificial Intelligence technologies for monitoring the transmission environment in communications, monitoring and control of disturbances in communication channels for connection, biometric voice diagnostics and facial recognition in hierarchical access administration, etc. The candidate is a member of the Union of "Electronics, Electrical Engineering and Telecommunications" (EEET). He has participated in scientific research projects (in one as a leader and 4 as a team member). All this proves his abilities to conduct scientific research and applied scientific activity and shows teamwork skills.

2.3. Implementation activity

No documents filed for applications for patents, utility models, inventions, etc. The candidate was the head of one and a member of the team of three university research projects, participated in the team of a project under the Operational Program "Science and Education for Smart Growth". All of them have successfully completed the development of models and software applications that can be used in the learning process.

3. Contributions (scientific, scientific-applied, applied)

I agree essentially with the contributions proposed by the candidate (classified as scientific, scientific-applied, applied). They are jointly summarized based on the achievements in the presented publications under Indicators B4, G7 and G8 and can be attributed to *Creation of new models, methods, algorithms; Proving by new means substantial new aspects of already existing scientific problems; Obtaining corroborating facts* .

4. Assessment of the candidate's personal contribution. Significance of contributions to science and practice

Contributions are the personal work of the candidate, which is evident from the large number of scientific studies published in collections and journals, indexed in world-famous databases with

scientific information, from participation in scientific research projects, from the numerous citations of scientific works in representative foreign publications.

When checking in *Scopus, h- index = 5* is visible for the candidate, which is a high score for achieved fame in scientific circles (39 publications and 63 citations).

5. Critical notes and recommendations

I have no significant objections to the scientific production presented. It is desirable to attach to the submitted documents official references for the educational and pedagogical activity of the candidate (auditory employment, led lecture courses, etc.), for implemented scientific and applied developments, etc. I recommend the candidate to participate in the preparation and publication of monographs, as well as to develop and publish independent articles and reports in publications indexed in world-renowned databases of scientific information.

6. Personal impressions

I don't know personally Chief Assist. Dr. Eng. Georgi Georgiev, but the presented documents show a high level of professionalism.

7. Conclusion:

Having in mind the above, I propose Chief Assist. Dr. Eng. Georgi Ivanov Georgiev
to be elected as an "associate professor" in a field of higher education - 5. Technical sciences, professional direction - 5.3. Communication and computer equipment,
specialty - "Communication networks and systems" (Communication and computer systems, Measurements in the communications)

05.10.2024   Member of the scientific jury: /signature/
                      /Prof. Emilia Dimitrova, PhD/