

OPINION

on the competition for the academic position of "Associate Professor" in the field of higher education 5 Technical Sciences, professional field 5.2 Electrical Engineering, Electronics and Automation, specialty "Biomedical Engineering and Technologies", announced in the State Gazette No. 15/21.02. 2025 for the Medical University-Varna " Prof. Dr. Paraskev Stoyanov",

with candidate: **Chief Asst. Eng. Nikolay Tinkov Dukov, PhD,**

Jury Member: **Assoc. Prof. Eng. Dian Venkov Malamov, PhD,** Paisii Hilendarski University of Plovdiv

1. General characteristics of the candidate's scientific research and applied scientific activities.

Chief Asst. Eng. Nikolay Tinkov Dukov has submitted a total of thirty-three scientific papers for participation in the competition for the academic position of "Associate Professor", which do not include those for the PhD degree.

The candidate participated in the competition with eleven scientific papers, which were declared equivalent to a scientific monograph (group C 4). The scientific papers are united by the thematic direction related to the synthesis of virtual numerical and physical models (phantoms) that simulate human anatomy, especially the mammary gland. The scientific papers have been published in referenced and indexed in world-renowned databases of scientific information, with eight in publications with an impact factor (IF). Five of the scientific papers in this group are with quartile Q1, and three with quartile Q2. The scientific papers in group C4 form 108.48 points with a minimum requirement of 100 points. All articles in this group are co-authored, with the candidate being the first author in four articles and the second author in three.

The candidate has indicated eighteen scientific papers in group D7, of which in one is the sole author, and the rest are co-authored. In five scientific papers he is the first author, in four the second. All scientific papers in group D7 are in publications, referenced and indexed in world-renowned databases of scientific information, two of which have an impact factor (IF). Scientific papers in group D7 indicators form 204.37 points with a minimum requirement of 200 points.

The candidate has indicated four additional scientific papers in group D7, of which three are published in referenced and indexed in world-renowned databases of scientific information. Together with the additionally submitted scientific papers, a total of 254.03 points are formed for group D7.

The total impact factor (IF) of the scientific papers that the candidate has announced for participation in the competition for associate professor is 28.67.

The candidate has provided information for indicator E 12 about five citations in Scopus of the papers with which he participates in the competition. For indicator E12, the minimum requirement of fifty points is met. In addition to the information for indicator E12, he has submitted two more citations in Scopus. Thus, the points for indicator E12 become seventy.

The active participation of the candidate in scientific and educational projects is impressive - two international, thirteen national and one of a different nature.

From the analysis of the submitted documents on scientific research activity, I firmly believe that Chief Asst. Eng Nikolay Tinkov Dukov has an active participation in the research activity reflected in the scientific papers announced for participation in the competition. The quantitative and qualitative requirements regarding the scient metric criteria are met, according to the requirements of the Law on Academic staff of the Republic of Bulgaria, the Regulations for the Application of the Law on Academic staff of the Republic of Bulgaria and the Regulations for the Development of the Academic staff of the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna

2. Assessment of the candidate's pedagogical training and activities.

Teaching activities of Chief Asst. Nikolay Dukov. He started as a "part-time assistant" from 2014 to 2017 at the Department of "Electronics and Microelectronics", Technical University-Varna. From 2017 to 2020 he was an "Assistant" at the Department of "Computer Science and Technology" of Technical University - Varna. From 2020 to 2021 he was an "Assistant" at the Department of "Medical Equipment, Electronic and Information Technologies in Healthcare", Medical University "Prof. Dr. Paraskev Stoyanov" Varna, and from 2021 to the present he is a "Chief Assistant" in the same department. His teaching experience as a full-time lecturer is over seven years. Over the last three academic years, Chief Asst. Nikolay Dukov has a total classroom workload of 331 hours of lectures, 858 hours of exercises and 30 hours of practical training in disciplines related to the scientific specialty of the competition for "Associate Professor".

Chief Asst. Nikolay Dukov specialized from 2013 to 2014. at Ghent University, Ghent, Belgium, and from 2015. - 2015. at the University of Patras, Patras, Greece.

Based on the review of the materials proposed by the candidate, I believe that Chief Asst. Nikolay Dukov has very good pedagogical training and the necessary competencies for

a leading teacher of academic disciplines in the field of the scientific specialty of the competition for "Associate Professor".

3. Scientific and scientifically applied contributions.

Based on the scientific works in Chief Asst. Nikolay Dukov has presented scientific and scientifically applied contributions in four thematic areas. The general topic is in the field of synthesizing numerical and physical models of phantoms in medicine. Ten scientific contributions, six scientifically applied contributions and three applied contributions have been announced. The emphasis of the applied contributions is directed towards the development of the educational process in medical education.

All scientific works in which the author has stated the claims for scientific and scientifically applied contributions have been published in Scopus and Web of Science, with a large part having an impact factor (IF). I accept the claims for scientific, scientifically applied and applied contributions stated by the candidate.

4. Significance of contributions to science and practice.

The contributions presented by the candidate are based on scientific papers in groups C4 and D7, published in, referenced and indexed in world-renowned databases with scientific information. The total impact factor (IF) is 28.67. Part of the scientific papers are in quartiles Q1 and Q2. This shows the significance of the candidate's scientific and scientifically applied contributions to science and practice. Applied contributions are mainly related to the development of new teaching methods in medical education.

5. Critical remarks and recommendations.

I have no critical remarks, questions and recommendations for the candidate.

6. Conclusion.

Based on my familiarization with the materials for the competition, my positive assessments of the candidate's scientific and teaching activities, the significance of the achieved scientific and scientifically applied contributions, I confidently propose of **Chief Asst Eng. Nikolay Tinkov Dukov, PhD**, to occupy the academic position of "Associate Professor" in the field of higher education 5 Technical Sciences, professional field 5.2 Electrical Engineering, Electronics and Automation, specialty "Biomedical Engineering and Technologies".

Date:

09. 06. 2025

Jury Member:.

Assoc. Prof. Eng. Dian Malamov, PhD

Заличено на основание чл. 5,
§1, б. „В“ от Регламент (ЕС)
2016/679