

## OPINION

on a competition for the academic position "Professor"  
in the professional field 5.2 "Electrical engineering, electronics and automation"  
(High voltage technology).

announced in SG no. 7 / 23.01.2024

with candidate: Assoc. Prof. Eng. Margreta Parashkevanova Vasileva, PhD

Member of the scientific jury: **Prof. Eng. Vasil Dimitrov Dimitrov, PhD,**  
VTU "T. Kableshkov" - Sofia

The opinion was prepared on the basis of Order No. P-109-95/21.03.2024 of the Rector of the Medical University "Prof. Dr. P. Stoyanov" - Varna and in accordance with the decisions of the scientific jury, taken at its first meeting on 01.04.2024.

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

According to the Regulations for the development of the academic staff at the Medical University "Prof. Dr. P. Stoyanov" - Varna (RDAS), to occupy AP "Professor" in area 5. Technical sciences, it is necessary to meet requirements by Groups of indicators, as follows: A (50 points), V (100 points), G (200 points, as for  $G7 \geq 80$  points), D (100 points) and E (150 points) After a thorough review of the competition documents, it can be concluded that these requirements are satisfied and the research activity of the candidate 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 "*Limiting overvoltages in electrical networks 20 kV*", Diploma No. 29589 of 07.03.2005 (Protocol No. 17 of 20.12.2004 of VAK) in the scientific specialty "Technology of high voltages". A list of dissertation publications is included with the documents for the current competition.

**Indicator V4 – 195 points:** the candidate has presented 10 Scientific publications in editions, referenced and indexed in world-famous databases with scientific information (in co-authorship: 1 publication with 2 authors, 6 – with 3 and 3 – with 4 authors). In 4 of the publications, the candidate is the first author, in 3 she is the second, in 1 - the third, in 2 - the fourth: 3 articles in specialized scientific journals and 7 reports at international scientific conferences are presented. A Habilitation Extended Reference summarizing the scientific contributions in these publications is submitted.

**Indicator G -** for participation in the competition, the candidate submitted 23 scientific publications other than those for the acquisition of AP "Assoc. Prof." and ESD "Doctor". 18 of the publications are in English and 5 in Bulgarian. They are divided into indicators G7 and G8 as follows:

**G7 – 4** Scientific publications in editions, referenced and indexed in world-famous databases with scientific information - a total of **93.33 points**. One of them is in sole authorship, the rest - in co-authorship (the candidate is the first author): 2 publications with 2 authors and 1 - with 3 authors. Reports have been presented at international scientific conferences in Bulgaria: *BulEF*, *EE* and *AE* (*Energy Efficiency and Agricultural Engineering*) and *ICEST* (*Information, Communication and Energy Systems and Technologies*) published in the IEEE Xplore Platforms Digital Library (indexed in *Scopus*).

**G8 - 19** Scientific publications in non-refereed journals with scientific review or in edited collective works (1 in sole authorship and 18 in co-authorship): 5 publications with 2 authors, 6 - with 3 and 7 - with 4) - a total of **145 points**. In 7 of the co-authored publications the candidate is the first author, in 6 she is the second author, in 3 is third and in 2 – fourth. Reports have been presented at scientific conferences in Bulgaria and abroad - *ICEST*, *ELMA* and others in the field of electricity.

Total number of points according to **Indicator G – 238.33 points**, which exceeds the requirements, including the Indicator G7.

**Indicator D** - for participation in the competition, the candidate submitted 17 citations of her publications in scientific editions indexed in Scopus / Web of Science (4 of them are by foreign authors): **170 points**, which significantly exceeds the requirement.

**Indicator E:** documents have been submitted to satisfy the requirements:

An official note from the doctoral center of the Technical University – Varna is attached and assures that Assoc. Prof. Margreta Vasileva was the supervisor of successfully defended their dissertations PhD students Rositsa Filcheva Dimitrova (2019) and Danail Petev Stanchev (2021). A Certificate from the doctoral school of the Medical University "Prof. Dr. P. Stoyanov" assures that Assoc. Prof. Margreta Vasileva was the scientific co-supervisor of Inna Stoyanova Nenova, who successfully defended her PhD thesis in 2024.

The candidate has been the Head of one research contract with national funding (to the "Science" Fund) and a member of five collectives for the development of national scientific or educational projects.

To participate in the competition, the candidate submitted two published university textbooks and two manuals:

- *M. Vasileva, Electrotechnical materials, ISBN 978-619-221-337-4, MU-Varna, 2021;*
- *A. Georgiev, M. Vasileva, Materials and components of computer technology, ISBN 978-619-221-325-1, MU-Varna, 2021;*
- *M. Vasileva, M. Ivanova, R. Dimitrova, Manual for Laboratory Exercises in Electrotechnical Materials, ISBN 978-954-20-0753-1, TU-Varna, 2016;*
- *M. Vasileva, M. Ivanova, R. Dimitrova, Sample tests on electrotechnical materials, ISBN 978-954-20-0752-4, TU-Varna, 2016.*

Total number of points under **Indicator E – 203.34 points**, which significantly exceeds the requirements.

Scientific research and applied research activities are mainly aimed at model studies of the occurrence and limitation of overvoltages in electrical systems, research of wave processes in grounding installations of electrical power facilities and electrical safety in electrical power systems, modeling and research of processes in electrical equipment.

The submitted documents prove the candidate's abilities to carry out scientific research and applied scientific activities. The extensive composition of the author collectives in the publications shows teamwork skills.

*In conclusion, I believe that the submitted materials for the competition significantly exceed the minimum national requirements and those of MU "Prof. Dr. P. Stoyanov" - Varna for the academic position of "Professor" and are at a high scientific, technical and professional level.*

## **2. Evaluation of the pedagogical preparation and activity of the candidate**

Assoc. Prof. Margreta Vasileva has conducted over 300 hours of lectures at the MU "Prof. Dr. P. Stoyanov" - Varna. Participated in the publication of two textbooks and two manuals. She is the supervisor of successfully defended PhD students. For the period 2015-2019, she was Deputy Rector for academic activities of the Technical University - Varna.

*It can be concluded that the candidate's pedagogical training and teaching activities are at a high professional level.*

### 3. Main contributions

I agree in substance with the contributions proposed by the applicant, summarized on the basis of the publications presented under indicators V4, G7 and G8.

Contributions are mainly scientific and scientific-applied, and can be attributed to *Creation of new models and methods; Proving by new means substantial new aspects of already existing scientific problems*. They also have an educational aspect and can be introduced as contemporary methods in teaching students in appropriate disciplines.

The contributions are the personal work of the candidate or with her decisive participation, which is evident from the large number of presented models, simulations and scientific studies, from the citations of the scientific works in representative editions visible in Scopus.

### 4. Significance of contributions for science and practice

I value the candidate's scientific works published in prestigious publications as significant. The necessary publicity and recognition of the candidate before the professional scientific community at home and abroad has been achieved. *The reference made in Scopus shows for the candidate **h-index** = 4 (if self-citations are excluded), which is a high score for achieved fame in scientific circles: 25 publications; 55 citations in 39 documents; 5 citations each in the last two years:*

Vasileva, Margreta P.  
Medical University-Varna, Varna, Bulgaria  
Author ID:27868172700

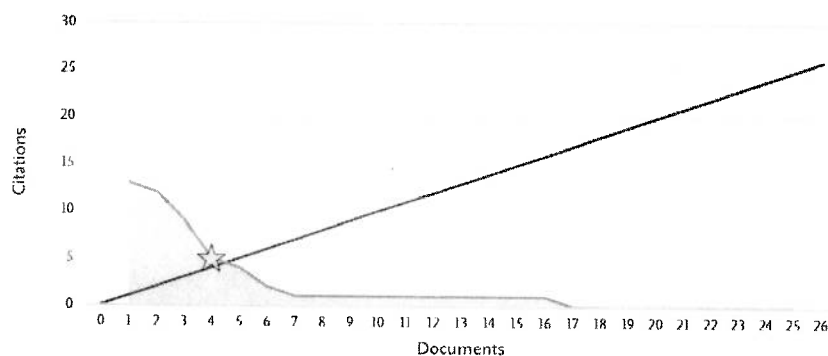
Analyze documents published between: 2007 to 2024  
☐ Exclude self citations ☒ Exclude citations from books [Update Graph](#)

Documents ↓ Citations ↓ Title ↓

1	13	Simulation model of ...
2	12	A methodology for d...
3	9	Lightning overvoltage...
4	5	Increasing the educa...
5	4	Reliability assessment
6	2	Co-ordination of the ...
7	1	Influence of frequen...
8	1	Statistical analysis of ...
9	1	Switching transients ...

This author's h-index

The h-index is based upon the number of documents and number of citations.



### 5. Critical notes and recommendations

I have no significant objections to the scientific production presented. The documents are systematized and described precisely, professionally and at a high level. I have some recommendations, mostly regarding the candidate's future development:

✓ to participate in the publication of monographs, in international research projects, in the development of publications for editions with an impact factor IF or an impact rank SJR;

✓ to share her rich teaching experience with colleagues from foreign universities (e.g. under the Erasmus programme).

✓ No data is presented for membership in councils, scientific organizations, unions and committees, for the development of study documentation, for supervising of graduates. Although the requirements for occupying the academic position of "professor" do not include such indicators, the application of such

references creates an opportunity for a comprehensive assessment of the candidate's research, teaching and administrative activities.

### CONCLUSION

The submitted materials for participation in the competition meet the requirements of the LDASRB, the Regulations for its application and the RDAS at the Medical University "Prof. Dr. P. Stoyanov" - Varna. Prominence has been achieved in academia and the professional engineering community. A large part of the candidate's research activity indicators was exceeded, and the total number of points significantly exceeded the requirements (1.43 times):

A group of metrics	Points as required	Candidate Points	Indicator points	Overrun
A	50	50	Indicator A1 – 50 p.	-
V	100	195	Indicator V4 – 195 p.	1.95 x V <sub>min</sub>
G	200 (G7 ≥ 80)	238.33	Indicator G7 – 93.33 p. Indicator G8 – 145 p.	1.19 x G <sub>min</sub>
D	100	170	Indicator D12 – 170 p.	1.7 x D <sub>min</sub>
E	150	203.34	Indicator E17 – 60 p. Indicator E18 – 50 p. Indicator E20 – 20 p. Indicator E23 – 60 p. Indicator E24 – 13.34 p.	1.36 x E <sub>min</sub>
Total	600	856.67		

Based on the acquaintance with the presented scientific works and materials, their importance, the scientific, scientific-applied and methodical contributions contained in them, I find it reasonable to propose **Assoc. Prof. Eng. Margreta Parashkevanova Vasileva, PhD** to occupy the academic position "Professor" in the professional field 5.2 "Electrical engineering, electronics and automation" in the specialty "High voltage technology".

20.05.2024

MEMBER OF THE JURY: .

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

/ Prof. Vasil Dimitrov, PhD /