O p i n i o n

by Prof. Dr. Valchan Todorov Georgiev, Technical University - Sofia
(academic position, scientific degree, full name, higher education institution, scientific organization)

of the materials submitted for participation in a competition
for the academic position of "professor" in
field of higher education – 5. Technical sciences,
by professional field – 5.2. Electrical engineering, electronics and automation,
specialty - "Electrical supply and electrical equipment" (Lighting and installation equipment)

In the competition for a professor, announced in the State Gazette, issue 48/13.06.2025 and on the website of TU-Gabrovo for the needs of the Department of "Electrical Supply and Electrical Equipment" at the Faculty of Electrical Engineering and Electronics, Assoc. Prof. Dr. Plamen Tsenkov Tsankov participated as a candidate.

1. Overview of the content and results in the presented papers

The candidate - Assoc. Prof. Dr. Plamen Tsenkov Tsankov participated in the competition with a total of 34 articles and reports, 2 textbooks, 2 utility model certificates and one patent application, 31 citations, 6 reviews. There are two doctoral students who have defended their doctoral dissertations. Out of 34 articles and reports, 13 are referenced in world-renowned databases, and the remaining 21 are in non-refereed journals with scientific review. Ten of the referenced publications replace habilitation work.
The following table presents a summary of the candidate's points and the fulfillment of the minimum state requirements, according to the regulations for the implementation of the Act on the Development of the Academic Staff in the Republic of Bulgaria.

Group show .	indicator	Candidate points	Min. requirements, (TU-Sofia regulations)
A	Dissertation for the ONS "Doctor"	50	50
B	Dissertation for the National Academy of Sciences "Doctor of Science"	-	-
In	Scientific publications replacing habilitation . thesis (min. 10, points ≥100)	10 pcs. 260.57	1 0 reports 10 0 points
G	Scientific publications (refereed 30 pts., unrefereed 214.02 pts.)	244.02	2 00
D	Citations (31), reviews (6)	370	100
E	Guide for a successfully defended doctoral student – 2 pcs ., 80 pp., Scientific or educational projects led by the candidate – 8 pcs., 160 t University textbook 2 pcs. – 40 years old. Published patent application – 1 pc, 20t. Utility model certificate – 2 pcs. , 80t.	380	150

The minimum state requirements were exceeded 2.17 times.

The minimum requirements of TU-Gabrovo for the scientific and teaching activities of candidates for the academic position of "professor" are also met:

	Min. requirements	Assoc. Prof. Dr. P. Tsankov
Total number of publications (articles and reports)	30 pcs. 5 independent, 3 with IF (WoS)	34 pcs. 6 independent, 4 with IF (WoS)
Number of known citations by other authors	20	31
Published textbooks	2	2
Successfully defended doctoral dissertations	1	2
Project management / contracts for borrowed funds	3	8

2. General characteristics of the candidate's activities

2.1. Educational and pedagogical activities (work with students and doctoral students)

The candidate has been a lecturer at TU- Gabrovo since 1997 and has almost 28 years of teaching experience. The candidate has submitted a report on the classroom employment, according to which his average classroom employment over the last 4 years is 536 hours/year. , is the holder of 4 disciplines from the OKS "Bachelor" and 3 disciplines from the OKS "Master". He has participated in the construction of 2 teaching laboratories. He has developed 14 curricula, is a co-author of 2 textbooks. All this shows a serious commitment to educational and pedagogical work, and the two doctoral students who defended their doctoral dissertations also speak about the results achieved.

2.2. Scientific and applied scientific activities

The candidate's scientific interest is focused mainly on lighting technology and the application of renewable energy sources (photovoltaics).

The largest number of works – 19 pieces are in the field of research of lighting fixtures and light sources. Experimental studies of lighting fixtures (B.4.3, B.4.4, B.4.5, B.4.7, B.4.9, D8.3, D8.17, D8.18, D8.20) for various applications have been carried out. A comparative analysis of various lighting characteristics and electrical parameters has been carried out. With the help of computer models, the optical system has been optimized (D8.5, D8.6, D8.7). In publications (D8.8, D8.9, D8.11, D8.13, D8.21) the color characteristics of sources and lighting fixtures have been studied.

In publications (G8.1, G8.4, G8.10, G8.12, G8.14) indoor and outdoor lighting systems have been studied.

Various aspects of the application of photovoltaics in power supply systems are published in (B4.6, B4.8, B4.10, D7.1, D8.2, D8.14, D8.15, D8.19).

2.3. Implementation activity

The candidate has participated in the development of two research labs . He is the head of 5 research contracts with national funding and 3 research and application contracts, under which funds have been attracted. He has a patent application and two utility models. The specialized laboratory "Power Supply and Lighting Equipment" actively works with representatives of the Bulgarian lighting industry.

3. Contributions (scientific, applied science, applied). **Significance of contributions for science and practice**

The submitted "Author's Statement of Contributions to Scientific Papers" can be accepted. Summary of the more significant scientific contributions:

1. A methodology has been developed for analyzing and modeling photometric characteristics of luminaires.
2. Developed methodologies for technical and economic evaluation and optimization of lighting systems
3. photovoltaic yield .

4. Assessment of the candidate's personal contribution

The personal contribution of the candidate and his participation in the works submitted for participation in the competition is beyond doubt. Of the 34 articles and reports submitted, 6 are independent (18%). In 20 of the remaining 28 publications, the candidate is the first author (71%). His contribution is confirmed by the laboratories he has created and the management positions he has held.

5. Critical notes and recommendations

In the future, it would be good to make efforts to participate in large international projects, which would be a restoration of the experience that already exists at TU-Gabrovo.

6. Personal impressions

I have witnessed the candidate's professional development for a long time. I believe that he has all the necessary qualities to occupy the academic position of "professor".

7. Conclusion :

Considering the above, I propose Assoc. Prof. Dr. Plamen Tsenkov Tsankov to be elected as a "professor", in the field of higher education - 5. Technical sciences, professional field - 5.2. Electrical engineering, electronics and automation, specialty - "Electrical supply and electrical equipment (Lighting and installation equipment)".

10.10.2025 Jury member:

/Vulchan Georgiev/