

OPINION

by Prof. Eng. Ivaylo Stefanov Stoyanov, PhD.

**of the materials submitted for participation in a competition
for occupying the academic position "FULL PROFESSOR" in
Field of higher education - 5. Technical Sciences,
in the professional field - 5.2. Electrical Engineering, Electronics and Automation,
Specialty - "Electrical Supply and Electrical Equipment" (Lighting and Installation Equipment)**

In the competition for "professor", announced in the State Gazette, No. 48/13.06.2025 and on the website of the Technical University of Gabrovo for the needs of the Department of Electrical Supply and Electrical Equipment at the Faculty of Electrical Engineering and Electronics, as a candidate participates Assoc. Prof. Plamen Tsenkov Tsankov PhD.

1. Overview of the content and results of the submitted works

The candidate Assoc. Plamen Tsenkov Tsankov, PhD, holds a Diploma for PhD No. 0016/30.04.2013 in "Lighting Engineering and Light Sources" and holds the academic position of Associate Professor in the specialty "Electrical Supply and Electrical Equipment" at the Technical University of Gabrovo since 2015.

Assoc. Prof. Plamen Tsankov has presented a report on the fulfilment of scientometric data of the minimum national requirements for "Professor" in the field of higher education 5. "Technical Sciences", professional field 5.2. Electrical Engineering, Electronics and Automation and a reference for the fulfilment of the minimum requirements of the Technical University - Gabrovo for the scientific and teaching activities for the academic position of "Professor".

Assoc. Prof. Plamen Tsenkov Tsankov participated in the competition for the academic position of "Professor", having submitted for review a total of 34 scientific publications, 6 of which are independent, 2 textbooks, references for citations, successfully defended PhD students, work in scientific and educational projects, patent application and utility models. Materials are categorized as follows:

Group of indicators "B.4": 10 scientific publications in journals, refereed and indexed in SCOPUS, replacing a monograph in accordance with Art. 29, para. 1, item 3 of the Law on Scientific and Scientific Research, 2 of which are independent, and the rest are co-authored and bring him a total of 260.57 points;

Group of indicators "G.7": 3 scientific publications in journals that are refereed and indexed in world-famous databases with scientific information, all of which are co-authored and bring him a total of 30 points;

Indicator group "G.8": 21 scientific publications in non-refereed journals with scientific peer-review or in edited collective volumes, 4 of which are independent and the rest are co-authored and bring him a total of 214.02 points;

Indicator group "E": A reference for 31 citations and 6 reviews in scientific journals, refereed and indexed in world-famous databases with scientific information, is presented, which brings it 370 points;

Group of indicators "E": References are presented for: management of 2 successfully defended PhD students (80 points); management of 8 projects (160 points); printed two textbooks (40 points); 1 patent application (20 points) and 2 recognized applications for a utility model (80 points), which brings him a total of 380 points.

Assoc. Prof. Plamen Tsenkov Tsankov, who is a member of the International Commission on Illumination; IEEE; Chairman of the EFTA Professional Section at the Regional College - Gabrovo of CEIP; Chairman of the Territorial Organization of the STC – Gabrovo; Member of the Management Board of the Federation of Scientific and Technical Unions in Bulgaria; Member of the Management

Board of the National Lighting Committee in Bulgaria; Member of the Governing Board of the Union for Electronics, Electrical Engineering and Communications; Member of the Bulgarian National Lighting Committee; member of the Union of Physicists in Bulgaria.

I accept the official notes certifying the participation and management of a scientific applied contract, and research developments, developed curricula, lectures delivered, educational activities, etc. I note and report on the teaching aids that have been reviewed before their publication.

The total number of points Assoc. Prof. Plamen Tsenkov Tsankov PhD is 1354.59 points, and in each of the group of indicators there is an excess of the minimum requirements. This is an excellent certificate of the candidate's research and teaching work.

2. General characteristics of the applicant's activity

2.1. Educational and pedagogical activity

The candidate shall provide information related to his/her professional training and his/her continuous striving for professional improvement over the years, having completed 8 courses related to his/her professional activity and 1 course in foreign language training.

His classroom workload in the last 4 academic years at the Technical University of Gabrovo exceeds 500 hours per year and is related to lecturing and conducting exercises in 7 academic disciplines, which are directly related to the field of the announced competition. The candidate has participated in the team of authors in the development of 14 bachelor's and master's degree programs for students majoring in Electrical Supply and Electrical Equipment. Under his leadership, two teaching laboratories were built and 2 research laboratories were established.

I believe that the educational pedagogical training and activities of Assoc. Prof. Plamen Tsenkov Tsankov PhD fully satisfies the requirements for this group of indicators.

2.2. Scientific and applied scientific activities

The research and applied research activities of Assoc. Prof. Plamen Tsenkov Tsankov PhD includes 34 publications, covering a wide range of international forums in the country and abroad. Among the most significant of them are Lighting 2023, Lighting 2024, Energy Forum, UNITECH, BulLight, etc. The international specialized publications The Sun and Photovoltaic Technologies can be indicated here. Green Energy and Technology. Springer (2020), Energy and Buildings, Elsevier (2024), Applied Sciences. 2025.

The directions of the candidate's scientific and applied activities concern the processes and phenomena related to the research, modelling and optimization of the lighting and electrical parameters and characteristics of LED light sources and luminaires, inspection, design and optimization of indoor and outdoor lighting systems and power supply systems with photovoltaic power plants. These areas are widely touched upon in the scientific research in which Assoc. Prof. Plamen Tsenkov Tsankov PhD has provided information (summaries of publications and a reference to the contributions) for participation and management in the work of 8 research projects financed by funds from the state budget for scientific research.

2.3. Deployment activity

The materials for participation in the competition include 1 patent application and 2 registered utility models at the Patent Office of the Republic of Bulgaria. As an implementation activity, one can also point out the fact that a large part of his scientific developments are successfully used in the educational process in the disciplines led by him.

3. Contributions Significance of contributions to science and practice

I accept the submitted contributions from the candidate. I believe that the scientific, applied and applied contributions contained in the works of which Assoc. Plamen Tsenkov Tsankov, PhD, are relevant and significant for the development and enrichment of scientific research in the field of electricity supply and electrical equipment, lighting and installation equipment, photovoltaic systems and renewable energy. He is involved as an expert in the work of contracts awarded by companies.

The review of the activities of Assoc. PhD. Plamen Tsankov, without a doubt, leads to the conclusion that he is well known to the scientific community for his multifaceted activity, and the results of his research work have found application in practice.

4. Assessment of the applicant's personal contribution

Of the 36 works submitted in the competition (34 publications and 2 textbooks), 6 publications are independent, and in the rest Assoc. Prof. Plamen Tsenkov Tsankov PhD is a co-author. A separation protocol for the percentage participation of the authors has not been presented, which is why I accept its participation as equivalent. This, as well as the analysis of the scientific papers submitted for review, give me reason to believe that the candidate has a significant personal contribution to the materials submitted for the competition. From the reference made in the SCOPUS database, it can be seen that as of 30.10.2025 Assoc. PhD. Plamen Tsankov has 50 citations registered in SCOPUS and the Hirsch index from SCOPUS - $h = 5$. He has been a member of scientific juries for the degree of Doctor and for occupying academic positions.

5. Critical remarks and recommendations

I have no significant remarks with which to dispute the main scientific, scientific-applied and applied contributions in the presented works of Assoc. Prof. Plamen Tsenkov Tsankov PhD. I do not note some formal omissions that are inevitable and in no way reduce the quality of the scientific publications presented.

6. Personal impressions

I know Assoc. Prof. PhD. Plamen Tsankov from joint participations in various scientific conferences and forums. He is an erudite lecturer with technical culture and solid theoretical training. These qualities are the basis for his success as a researcher and lecturer. All this is a prerequisite for high quality of the educational and research process and increasing the interest of students in the disciplines he teaches.

7. Conclusion

Bearing in mind the above, I propose

ASSOC. PROF. ENG. PLAMEN TSENKOV TSANKOV, PHD

to be elected for FULL 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)

02.11.2025

Jury member:

/Prof. PhD. Ivaylo Stoyanov/