Бургаски държавен университет
„Проф. д-р Асен Златаров"
8010 Бургас, бул. „Проф. Якимов" №1
Рег.№ 5202/10-11.20 26

OPINION

for a competition to fill the academic position of 'Associate Professor' in the field of higher education: 5. 'Technical Sciences', professional direction: 5.2. 'Electrical Engineering, Electronics and Automation', scientific specialty 'Electric Power Supply and Electrical Equipment' (Non-Conventional and Renewable Energy Sources), published in State Gazette, issue 65/17.07.2026 with candidate Chief Assistant Professor Vasil Borisov Ivanov, PhD
Member of a scientific jury, in accordance with Order No. RD-383/17.09.2026 of the Rector of Burgas State University 'Prof. Asen Zlatarov, PhD', Burgas:
Assoc. Prof. Svilen Radoslavov Rachev, PhD

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

The data presented by the candidate regarding compliance with the minimum national and institutional requirements serve as the basis for this assessment and are as follows:

Indicator A – 50 points obtained (minimum required – 50 points);
Indicator Group B – 100 points obtained (minimum required – 100 points);
Indicator Group Г – 280 points obtained (minimum required – 220 points);
Indicator Group Д – 90 points obtained (minimum required – 60 points);
Indicator Group E – 110 points obtained (there is no minimum number of points required);
Total points for Indicator Groups A+B+Г+Д+E – 630 points obtained.

For participation in the competition, the candidate, Chief Assistant Professor Vasil Borisov Ivanov, PhD, has submitted the following scientific publications on the announced topic 'Electric Power Supply and Electrical Equipment', which, classified by type, are as follows::

- monograph – 1 (one) item;
- scientific publications in journals that are peer-reviewed and indexed in internationally recognized scientific databases – 3 (three) items;
- scientific publications in non-indexed, peer-reviewed journals or in edited collective volumes – 11 (eleven) items.

All publications, with the exception of the monograph, are in English. Ten of the publications are single-authored, while the remainder are co-authored; in 12 (twelve) of these, the candidate is the first author, and in 2 (two), the candidate is the second author. Regarding the co-authored publications, I consider the contribution to be divided equally among the co-authors.

Using a plagiarism detection platform provided by the Ministry of Education and Science – for which I am a registered user – I found no matches within the publications

submitted by the candidate for the competition. I consider the submitted publications to be authentic.

The submitted publications demonstrate that the author's scientific achievements are sufficiently represented and recognized within the academic community.

Under criterion B, a monograph is presented that meets the established requirements. The monograph, titled "Investigation of Solar Voltage Inverters through Modeling and Practical Implementation" (published by "LIBRA SCORP," 2025; ISBN 978-619-273-123-6; 118 (one hundred and eighteen) pages, is directly relevant to the announced scope of the competition. It covers simulation-based studies with potential for practical implementation and can serve as a practical guide for specialists in the fields of electric power supply and electrical equipment.

There is also a list of scientific works submitted for the acquisition of the educational and scientific degree of 'PhD' – 5 (five) items.

There are 9 (nine) documented citations of the candidate's publications in works featured in journals that are refereed and indexed in internationally recognized scientific databases. These citations attest to the significance of the scientific works in question for both research and practice.

Four (4) certificates are presented, documenting the candidate's participation as a reviewer in international scientific conferences held under the auspices of the Institute of Electrical and Electronics Engineers (IEEE).

The candidate participated in 1 (one) project in 2016 (NIH 367/16, "Investigation of the Efficiency of a Voltage Inverter for Photovoltaic Systems via Modeling in the MATLAB/SIMULINK Software Environment" – a two-year project, led by Assoc. Prof. N. Simeonova, PhD) and served as the leader of 1 (one) other project in 2018 (NIH 419/18, "Design, Implementation, and Investigation of an Autonomous Intelligent Power Supply System for Low-Power Applications" – a two-year project).

In light of the above, it is determined that the points awarded across the individual criteria are fully sufficient to meet the relevant requirements.

II. Assessment of the candidate's pedagogical preparation and teaching activities

Eng. Vasil Borisov Ivanov, PhD completed his higher education, obtaining a Master's degree in 1998 at the Technical University of Varna, specializing in 'Radio and Television Engineering'. He obtained the educational and scientific degree of 'PhD' in 2017, following the defense of a dissertation titled "Investigation of the Impact of Photovoltaic Systems on Electrical Networks" (Diploma No./Date: RU-NS-2017-13/ 23.06.2017). From September 2017 to the present moment, after successfully passing a competition, he holds the academic position of 'Chief Assistant' at the primary unit: Electrical Engineering, Electronics and Mechanical Science, Faculty of Technical Sciences, Burgas State University 'Prof. Asen Zlatarov, PhD', professional direction 5.2. Electrical Engineering, Electronics and Automation. From August 2013 to September 2017, he held the position of 'Assistant' at the same workplace. During the period 2008–2010, he worked as an electronics teacher at the Vocational High School of Mechanical

and Electrical Engineering and Electronics (PGMEE) in the city of Burgas. His teaching experience spans approximately 18 (eighteen) years.

The provided reference of teaching hours indicates that the relevant subjects are: 'Electrical Measurements', 'EMPU', 'Electrical Engineering and Electronics', 'Electrical Engineering and Electrical Measurements', and 'Applied Electrical Engineering and Electronics' within the 'Bachelor' degree program (full-time and part-time); 'Renewable Energy Sources' and 'Practical Training – Part I' within the 'Professional Bachelor' degree program (full-time and part-time); and 'Electrical Engineering and Electrical Measurements', 'Non-conventional and Renewable Energy Sources', 'Diagnostics and Control of Electromechanical Devices', and 'Measuring and Control Instruments' within the 'Master' degree program (full-time and part-time). The total classroom teaching load submitted for the competition amounts to 865 (eight hundred and sixty-five) hours. Separate records are also provided detailing the teaching activities conducted by the candidate at the 'Bachelor', 'Professional Bachelor', and 'Master' degree levels over the preceding three academic years.

For the listed academic subjects, the candidate has participated in the development of curricula, which are in compliance with current requirements. These academic subjects are directly related to the scientific field of the announced competition.

Also presented are a manual and a study guide on 'Electrical Measurements', as well as a manual and a study guide on 'Electromechanical Devices'.

A list is provided containing 10 (ten) scale models developed by the candidate for the laboratory facilities of the primary unit: 'Electrical Engineering, Electronics, and Mechanical Engineering'.

Also included are lists of graduates who successfully defended their theses between 2016 and 2026 under the supervision of Chief Assistant Professor Vasil Borisov Ivanov, PhD: 20 (twenty) students at the Master's level and 9 (nine) students at the Bachelor's level.

In terms of experience, the candidate has developed a solid routine for conducting a high-quality educational process and possesses the necessary pedagogical qualifications.

In summary, I rate the candidate's pedagogical preparation and performance as excellent.

III. Contributions and their significance for science and practice

Regarding the monograph, I accept the 5 scientific-applied contributions formulated therein, as well as the 8 scientific and scientific-applied contributions based on the publications. I consider that the submitted publications contain the contributions claimed by the candidate.

I also consider all contributions classified as educational-methodological to be well-founded and valid.

There is a distinct trend for theoretical research to be directed both toward practical application and toward educational purposes.

The assessments conducted provide grounds to present Eng. Vasil Borisov Ivanov, PhD as a highly qualified and respected researcher in the specific field of electric power supply and electrical equipment.

His work to date reveals a certain preference for theoretical research and the exploration of suitable approaches and methods for problem-solving. At the same time, there is also a significant component of practical applications.

It is possible to implement some of the contributions.

In my opinion, the claimed contributions are the candidate's own work. Naturally, some of the existing publications are co-authored with colleagues, which also demonstrates an ability to work in a team.

The significance of the contributions to science and practice is indisputable, particularly with regard to decision-making and the implementation of measures concerning the operation of existing and newly designed low-voltage electrotechnical components and facilities.

The results obtained could potentially be applied directly within the scope of the candidate's involvement in research and engineering projects. Interest may also be expected from industrial users.

IV. Critical notes and recommendations

In principle, I have no significant critical remarks regarding the materials submitted by the candidate for the competition. There are minor technical inaccuracies in the submitted publications; however, these do not alter the excellent impression created by the results documented by the author. Overall, the presentation of the documentation is concise and substantive, adhering to the standards of contemporary Bulgarian and English.

I would like to highlight the high quality of the publications. It is evident that the author has invested significant effort into conducting the individual studies, as well as into processing and presenting the resulting findings in an appropriate manner.

The only thing missing is information regarding the candidate's membership in scientific and professional organizations.

V. Personal impressions of the candidate and other information not mentioned in the preceding points

In my personal assessment, the candidate is a highly qualified researcher. I am familiar with his professional career and development; I also served as a reviewer on the scientific jury for the candidate's acquisition of the educational and scientific degree of 'PhD'. Furthermore, he possesses the necessary pedagogical qualifications for conducting the educational process.

VI. Conclusion

The materials submitted by Eng. Vasil Borisov Ivanov, PhD for the competition identify him as a qualified lecturer in the Department of Electrical Engineering, Electronics, and Machine Science at the Burgas State University 'Prof. Asen Zlatarov, PhD', possessing excellent knowledge and skills. The candidate is known within the academic community through his work.

Based on a review of the submitted scientific works, their significance, and the contributions contained therein, as well as the described teaching activities, I consider that the candidate's scientific and pedagogical work fully complies with the Law on the

Development of the Academic Staff in the Republic of Bulgaria (LDASRB), the Regulations for the Application of the LDASRB, and the Regulations on the Conditions and Procedure for Acquiring Academic Degrees and Holding Academic Positions at the Burgas State University 'Prof. Asen Zlatarov, PhD'.

In view of the above, I consider it well-founded and propose that Chief Assistant Professor Vasil Borisov Ivanov, PhD be elected to the academic position of 'Associate Professor' in the field of higher education 5. 'Technical Sciences', professional direction 5.2. 'Electrical Engineering, Electronics, and Automation', and scientific specialty 'Electric Power Supply and Electrical Equipment' (Non-Conventional and Renewable Energy Sources).

November 4, 2026

Member of a scientific jury:
Assoc. Prof. Svilen Rachev, PhD