

Review

by Prof. PhD. Eng. Stefka Ivanova Nedelcheva - TU Sofia, IPF Sliven

on the materials presented for the competition for the academic position of "Associate Professor" in field - 5 "Technical sciences", in the professional field - 5.2 "Electrical engineering, electronics and automation" (Power supply and Electrical equipment), in Burgas Free University (BFU).

1. General description of the presented materials

I was appointed a member of the scientific jury of the competition for the academic position of "Associate Professor" at BSU in the field of higher education "Technical Sciences", professional field 5.2 "Electrical Engineering, Electronics and Automation" , announced for the needs of the Center for Informatics and Technical Sciences (CITN) with an order of the Rector of Burgas Free University (BSU).

For participation in the competition, announced in the State Gazette, issue 87 of 19.10.2021 and on the website of BSU, only one candidate has submitted documents:

Assistant Professor Eng. Ginko Angelov Georgiev PhD.

The materials presented by Dr. Ginko Angelov Georgiev are in accordance with the Regulation for the Development of the Academic Staff of BSU. He participated in the competition with a total of 1 monograph, 22 scientific publications, 2 teaching aids, an electronic textbook, a list of management of 2 projects and participation in 8 projects. The listed scientific papers are not included in the dissertation of the participant in the competition.

2. Brief biographical data of the candidate

Asst. Prof. Dr. Ginko Angelov Georgiev defended his dissertation in 2012 at VVMU "NY Vaptsarov" and obtained the scientific degree "Doctor" in the professional field 5.2. "Electrical Engineering, Electronics and Automation", 02.04.15 "Electricity supply and electrical equipment", which corresponds to the scientific specialty for which the competition for "Associate Professor" was announced.

Asst. Prof. Dr. Ginko Angelov Georgiev has 14 years of teaching and research experience. His professional experience is quite sufficient for the announced competition.

3. General characteristics of the candidate's activity

3.1. Evaluation of educational and pedagogical activity

The pedagogical training of Dr. Eng. Ginko Angelov Georgiev is at a high level with in-depth theoretical and practical knowledge. He has published 2 teaching aids and a textbook in electronic form to ensure the learning process.

3.2. Evaluation of the scientific activity of the candidate

Contributions to scientific papers (the monograph not included).

The presented scientific papers for participation in the competition are 22. Dr. Eng. Ginko Angelov Georgiev has 2 publications, referenced and indexed in world databases with scientific information (Scopus). The most significant contributions to scientific works are the following:

Contributions on the topic of electric drives - works [P0], [P4], [P10], [P12], [P13], [P15], [P20], [P22], [P23]:

- new models for research of the starting mode of the asynchronous electric drive;
- proving new facts about the effectiveness of vector control, which is achieved by suppressing low-frequency interference;
- modeling in MATLAB environment of frequency electric drives, etc.

Contributions on the topic of electricity supply - works [P24], [P25], [P26], [P27], [P31], [P32]:

- scientific and applied contribution to the assessment of the reliability of electricity supply to consumers;
- approach for complex assessment of the indicators of electricity quality with application of the mathematical theory for experiment planning, etc.

Contributions on the topic of "Electricity Quality" - works [P1], [P3], [P14], [P16], [P28], [P29]:

- Applied contribution on the appropriateness of research with "space vector" and others.

Contributions in the field of "Electricity from renewable energy sources" - works [P17], [P22]:

- Innovative approach in estimating the yield of hydrogen from fuel cells using electricity from a photovoltaic system;
- Applied contribution regarding software for assessment of electricity production from a photovoltaic power plant, etc.

The scientific contributions of the candidate are significant. The quantitative indicators of the criteria for holding the academic position of associate professor are met.

4. Assessment of the personal contributions of the candidate

The contributions made by Asst. Prof. Dr. Ginko Angelov Georgiev are results of his in-depth work in the field of research and are practically applicable. The contribution of the participant in the competition in the respective publications is his personal merit.

5. Critical remarks and recommendations

I have no significant remarks on the presented scientific papers.

On the monograph: in the presented copy in electronic version there are no reviewers - they actually assess whether the scientific work has the qualities of a monograph. In the conclusion of the monograph the author has not summarized his own contributions on the topic. It is not specified how many publications have been made based on the monograph.

On the teaching aids: "The manual for seminars and laboratory exercises on electrical machines" and "The manual for seminars and laboratory exercises on electrical appliances" - in the presented electronic versions there are no ISBNs, publishers and reviewers. The cited literary sources are classical. Recommendation: to cite more modern editions, in addition to the classic ones from 1960, 1966, 1976. Opinion: The manuals correspond to the material studied in the respective disciplines and will be useful in teaching students.

6. Personal impressions

I do not know Assistant Professor Dr. Ginko Angelov Georgiev personally. My impressions of him are based entirely on the materials presented in the competition. I believe that he is a professor with very good professional training and sufficient pedagogical experience. From the published scientific papers and published textbooks it is established that he can work independently.

Conclusion

The documents and materials presented by Assistant Professor Dr. Ginko Angelov Georgiev meet all the requirements of the Act on the Development of Academic Staff in the Republic of Bulgaria, the Regulation for its implementation and the relevant Regulations of BFU.

In the works of the candidate there are original scientific-applied and applied contributions. Theoretical developments have practical applicability. The results achieved by Assistant Professor Dr. Ginko Angelov Georgiev in teaching and research activities fully comply with the specific requirements of BFU.

The acquaintance with the presented materials on the competition and the scientific works, the analysis of their significance and the achieved contributions, allows me to give my positive assessment and to recommend to the Scientific Jury to choose Assistant Professor Ginko Angelov Georgiev as 'Associate Professor' at BSU. Professional field 5.2 "Electrical Engineering, Electronics and Automation" (Power Supply and Electrical Equipment).

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