

OPINION

Per. № 667/20.02.2020 г.

on a competition to occupy an academic position "Associate Professor" In field of higher education 5. "Technical Sciences", professional direction 5.2 "Electrical Engineering, Electronics and Automation", scientific specialty "Elements and devices of automation and computing (Sensors and sensor devices)", declared in the State Gazette, issue 93/26.11.2019 for the needs of the department of "Electronics, Electrical engineering and Machine science" of the "Prof. Assen Zlatarov" University
with the candidate **Eng. Ivaylo Raychev Belovski, PhD, chief assistant**

Reviewer: Eng. Nikola Vichev Kolev, PhD, Dr. Sci., Professor, appointed as a member of the Scientific Jury by order of the Rector of the "Prof. Dr. Assen Zlatarov" University as announced by S.G. issue 93 / 26.11.2019 competition for Associate Professor

1. Background and biography

Ivaylo Belovski graduated from Sredets Secondary School in 1991 and in 1998 he graduated from the Master's Degree Program in Radio and Television Engineering at the Technical University of Varna. He completed his doctorate at the Technical University - Gabrovo on the topic "Elements and Devices of Automation and Computer Engineering" and in 2016 defended his dissertation for the educational and scientific degree "Doctor" on the topic: "Development, research and application of a thermoelectric system based on Peltier elements".

Since 2012 he has been an assistant professor, and since 2016 he has been a chief assistant in the department "Electronics, electrical engineering and machine science" of the "Prof. Assen Zlatarov" University, Burgas.

To participate in the competition, Dr. Belovski submitted his documents on 01/21/2020.

2. General description of the materials presented

The candidate, Dr. Belovski, has submitted the following materials for participation in the competition for associate professor: application to the Rector, CV; a copy of the diploma of the doctoral degree; document for work experience, list and copy of scientific papers; monographic work; an author's reference to quoting his writings; author's reference for scientific contributions; pedagogical activity report, including a list of graduates led by Dr. Belovski; a statement of participation in research projects, a statement of compliance with the minimum requirements set out in Appendix 1 of the Rules of the Implementation of the ADAPRB (Act of Development of the Academic Personnel of the Republic of Bulgaria) and copies of declarations of compliance with paragraph 18 of the RIADAPRB.

3. General characteristics and contributions from research and development and the applicant's scientific and applied activities

The monograph is co-authored on "Research and Modeling of Thermoelectric Energy Converters", covering 220 pages, published in 2019 by the "Prof. Dr. Assen Zlatarov"

University and is dedicated to an actual problem, such as the development of thermoelectric converters, and has a clearly expressed engineering approach.

The lists of 32 scientific publications and reports submitted by the candidate for review, one monograph and three laboratory manuals do not include the dissertation publications for the doctoral degree. The list of participation in research and implementation projects includes the applicant's participation in 1 national, 8 in-house university projects, in one of which he was a leader, 1 external and 1 international project.

The analysis of the scientific works and activities, with which Dr. Belovski participates in the competition, shows that the candidate has 5 without co-authors and the rest are collective. All publications are in peer-reviewed publications - Annual of "Prof. Dr. Assen Zlatarov" University, Industrial Technology Journal, 4 publications in journals and thematic collections abroad, the rest - in proceedings of international conferences and symposia.

The complex nature of the developments with which Dr. Belovski participated in the competition, forced him to work in a team, and therefore not many of his scientific works are without co-authors. It is noteworthy that the publications have a deep analytical part, clear conclusions and serious literary validity.

The submitted scientific papers and contract activities are related, summarized by me, to the following thematic areas:

1) Research and optimization of characteristics, modeling and control of processes in thermoelectric modules and systems;

2) Application of neural networks and intuitionist fuzzy sets in thermoelectric systems;

3) Applied sensor systems.

I support the author's reference for the contributions from the creative activity of the applicant and classify them as scientifically applied and teaching-methodical. I accept that scientific works, apart from the monograph work, contain original contributions to the creation of methods and algorithms for the synthesis of measurement and control systems.

The examination of Dr. Belovski's documents shows that the procedural and legal requirements arising from the Rules of Procedure and Occupation of Academic Posts of the "Prof. Dr. Assen Zlatarov" University have been observed. The applicant has also fulfilled the academic requirements for "associate professor" according to Appendix 1 of the Rules of the "Prof. Assen Zlatarov" University, Burgas.

The candidate in the competition has not a legally proven plagiarism in his own scientific works (Art. 24, (5) of ADAPRB).

4. Assessment of the candidate's pedagogical training and activities

From the pedagogical reports provided by the "Prof. Dr. Assen Zlatarov" University, Burgas, it can be seen that Chief Assistant Dr. Belovski has had a full workload for the last three years. He has developed curricula and exercise programs for core courses, in which he has co-authored and instructed exercise manuals. Dr. Belovski has supervised 21 successful graduates.

According to a reference from the University for the academic security of the competition, Dr. Belovski teaches subjects that are permanently embedded in the curriculum.

5. The importance of contributions to science and practice

The importance of the created models, devices and systems, in my opinion, is indisputable, because there are some developments, some of which are implemented in the

development of scientific projects and contracts. Dr. Belovski's work has been successfully used in the education of the university students.

6. Critical notes and recommendations

I have no critical remarks on the merits, and I recommend that Dr. Belovski step up his publishing activity in reputable foreign scientific journals.

7. The personal impressions and opinion of the reviewer

I very much appreciate the results of Dr. Belovski's developments included in scientific publications and those included in projects and contracts with external and internal applicants, as well as the accumulated knowledge and experience.

8. CONCLUSION

On the basis of familiarization with the submitted by the applicant materials on the competition (scientific works, participation in projects and contracts, participation in the pedagogical activities), their importance, the scientific-applied and methodical contributions contained therein, I find it justified to propose Ch. Assistant Dr. Eng. Ivaylo Raichev Belovski be elected to occupy the academic position of "Associate Professor" in the professional field 5.2. "Electrical Engineering, Electronics and Automation", scientific specialty "Elements and Devices of Automation and Computer Engineering (Sensors and Sensor Devices)".

20.02.2020
Sofia

Gave an opinion:

/Eng. N. Kolev, PhD, Dr. Sci., Professor/