



OPINION

By Eng. Sotir Sotirov, PhD, Professor, "Prof. Dr. Assen Zlatarov" University – Burgas

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 Computer Engineering (Sensors and sensor devices)", declared in the State Gazette, issue РД - 25 / 24.01.2020 for the needs of "Prof. Dr. Assen Zlatarov" University

Biographical data

Chief Assistant Professor Dr. Ivaylo Raychev Belovski, PhD is the only candidate in the announced competition in State Gazette, 93 of 26.11.2019. He graduated from "St.St. Cyril and Methodius" - Sredets in 1991, Technical University - Varna as a specialist in "Radio and Television Equipment" in 1998. He has worked consecutively as a Laboratory Engineer of the High-frequency equipment, a Telecommunications Engineer and an Installation Engineer in several different companies. Since 2012 he is an assistant professor, and from 2016 until now he is a chief assistant professor in department of Electronics, Electrical Engineering and Mechanical Engineering at the Faculty of Technical Sciences of "Prof. Dr. Assen Zlatarov" University - Burgas.

General description of the materials presented

The applicant participates in the competition for the academic position "Associate Professor" with 32 publications as follows:

- monograph - 1, published by "Prof. Dr. Assen Zlatarov" University;
- manuals for laboratory exercises - 3;
- scientific publications, referenced and indexed in world-renowned scientific information databases (SCOPUS) - 7;
- Scientific publications in non-refereed journals with scientific review - 21.

Of the works, 5 are independent and the rest are with two or more co-authors.

The candidate meets the general criteria, and by certain indicators exceeds the minimum national requirements and the "Prof. Dr. Assen Zlatarov" University requirements.

He defended his dissertation work - indicator A - 50 points, presented monograph work - indicator B - 100 points, 29 publications - group of indicators D - 315.02 points, 12 citations - group of indicators D - 105 point, participation in 5 national scientific or educational projects, 1 international project and 3 study aids - group of indicators E - 106,7 points.

I do not review publications 2.1, 2.2, 2.3 and 3.15 that I co-authored.

General characteristics of the applicant's research and applied activities

The results and studies presented in the publications can be summarized in several thematic areas:

1. Theoretical-experimental models of thermoelectric cooling systems based on single-stage and cascaded Peltier modules have been developed using the regression analysis method;
2. Theoretical and experimental model of the Seebeck thermoelectric generator module was implemented by the method of regression analysis;
3. Modeling and optimization of the thermal resistance of a cold heat sink in a thermoelectric pump using the finite difference method;
4. An analytical model of a thermoelectric cooling system, represented by a neural network, is proposed.
5. A user application has been created to calculate the basic thermo-physical parameters of Peltier modules and represent their conversion characteristics graphically.

Overall conclusion

The scientific activity of Dr. Eng. Ivaylo Belovski covers the requirements of the Rules for the conditions and procedure for obtaining academic degrees and occupation of academic positions at the "Prof. Dr. Assen Zlatarov" University - Burgas.

The teaching activities of Dr. Eng. Ivaylo Belovski are extremely diverse. He conducts laboratory exercises and lectures in many disciplines. His workload for the last few academic years is over 500 hours.

I have known the candidate since he became an assistant professor. He is able-bodied and persistent. It is easy to work with Dr. Belovsky and write scientific publications. As you can see from the list of publications with Dr. Belovsky, we have several joint publications.

All of the above is a reason to give a positive assessment of the materials with which the applicant participates in the competition for "associate professor" and to recommend to the honorable members of the Scientific Jury, and subsequently to the honorable members of the Faculty Board of FTN, to vote positively for the award of **Ch. Assistant Professor Ivaylo Belovski** to the academic position of "**Associate Professor**" in the professional field 5.2 Electrical Engineering, Electronics and Automation in the specialty "Elements and Devices of Automation and Computer Engineering (Sensors and Sensor Devices).

20.03.2020
Burgas

Gave an opinion:

/Eng. S. Sotirov, PhD, Professor/