

STATEMENT

in a competition for acquiring an academic position "Associate Professor"

in a professional field 5.2. Electrical engineering, electronics and automation, specialty "Power engineering (Electrical networks and systems)"

announced in State Newspaper № 42 from 12.05.2023 for the needs of the Department of "Electronics, Electrical Engineering and Mechanical Science" of Prof. Dr. Asen Zlatarov University, Burgas, Faculty of Technical Sciences.

with candidate: Eng. Mehmed Kadir Hasan PhD, chief assistant at the Department of Electronics, Electrical Engineering and Mechanical Science of Prof. Dr. Asen Zlatarov University, Burgas, Faculty of Technical Sciences

Member of the scientific jury: Eng. Misho Ivanov Matsankov, PhD, Assoc. Professor at the Technical University - Sofia

General characteristics of the research and scientific-applied activity of the candidate

The candidate holds a doctorate in Electrical Networks and Systems since 2021, when he defended his dissertation at the Technical University of Sofia, Faculty of Engineering and Pedagogy - Sliven, he obtained his master's degree in 2000 at the Technical University of Varna, majoring in "Electrical Engineering".

In the period from 1997 to 2002, he was a teacher at Prof. Dr. Asen Zlatarov University, Burgas. From 2018 to the present, he held the positions of assistant and chief assistant.

The works submitted for the competition for "associate professor" are categorized in accordance with ZRAS, PPZRAS and the specific requirements in the regulations of the University of Prof. Dr. Asen Zlatarov, Burgas, by groups of indicators as follows:

<u>Indicator group A:</u> (50 points) diploma for the award of the educational scientific degree "Doctor". The candidate satisfies the requirement of this indicator.

Indicator group B: (100 points) the requirement for a thesis or monograph. The candidate under this indicator submits the monograph: "Hasan KM, Active-adaptive electrical networks, ISBN 978-954-167-467-1, TU-Sofia Publishing House, 2022. The candidate with the presented monograph satisfies the requirements under this indicator.

Indicator group C: requires collecting 300 points on various criteria.

For scientific publications in publications that are referenced and indexed in world-renowned databases with scientific information, the candidate submits three independent publications presented at foreign and Bulgarian scientific forums and journals, which brings the candidate 120 points.

For "Scientific publication in non-refereed journals with scientific review", the candidate submits a list of 14 scientific publications, 12 of which are independent and 2 co-authored, covering 260 points.

The total number of points of the candidate according to Indicator group C is 380 points, which exceeds the required points according to this criterion.

<u>Indicator group D</u> concerns the citations of the candidate's works and requires a total of 100 points in various criteria as follows:

Cited in scientific publications, referenced and indexed in world-renowned databases of scientific information, the candidate claims 80 points.

Cited in non-refereed peer-reviewed journals, the candidate claims 42 points.

The total number of points of the candidate according to Indicators group D is 122 points, which exceeds the required ones according to this criterion.

<u>Indicator group E</u> it concerns participation in research projects, publishing textbooks and teaching aids, according to this indicator the required points are 100, and the candidate for the academic position of associate professor claims 160, which exceeds the required points according to the criterion.

The candidate fulfills and by certain indicators exceeds the required levels with the scientific activity presented in the competition.

2. Assessment of the pedagogical preparation and activity of the candidate.

The candidate participates in the competition for the acquisition of the academic position of Assoc Professor with three textbooks and three study aids, has a pedagogical license and can be said to be at the required level.

3. Main scientific and applied scientific contributions.

The main scientific and applied contributions of the candidate, which are presented in the publications of the competition, can be defined as the design and development of power systems. Parameters of distributed networks have been studied and determined; conditions for transmission of electricity; determining parameters of transformers. The scientific and applied problems of this topic include using real-time data, an approach to compose an optimal structure of a smart electric grids.

Applied contributions are achieved with technical solutions to tasks arising from the operation of power plants.

In general, the candidate's publications present results that are valuable for operation and design. It can be considered that the candidate's publications present good examples of implemented scientific and applied engineering solutions.

4. Significance of contributions for science and practice

The candidate's publications are aimed at the practice and implementation of design solutions in the operation of the energy system in practical engineering

solutions. Undoubtedly, the obtained results are scientific and applied contributions of the candidate and are useful and significant for practice.

5. Critical notes and recommendations

I have no significant critical comments on the candidate's scientific creativity and publication activity. I believe that Dr. Mehmed Hasan has accumulated research and practical experience in the field of design and operation of electric power systems, and in this sense I recommend sharing him in more refereed scientific forums and publications. This will lead to receiving feedback on his scientific and applied results not only from university colleagues

Conclusion

Based on the presented scientific works, their significance, the scientific and applied contributions contained in them, I find it reasonable to offer the candidate Ch. assistant professor Eng. Mehmed Hasan PhD to take the academic position of "Associate Professor" in the Department of "Electronics, Electrical Engineering and Mechanical Science" at the Faculty of Technical Sciences of the University Prof. Dr. Asen Zlatarov Burgas in the professional direction 5.2 "Electrical Engineering, Electronics and Automation", specialty "Power Engineering (Electrical Networks and Systems)".

Member of the Scientific Jury:

16.08.2023

assoc. prof. Eng. M. Matsankov PhD