

## **Statement**

on competition for the academic position of “Associate Professor” in professional field 5.2 “Electrical engineering, electronics and automation”, specialty “Electrical Measurements”, department of “Theory of Electrical Engineering and Measurement“, Faculty of Electrical Engineering

candidate: Senior Assistant Professor Hristo Jivomirov Karaivanov

Scientific jury member: Associate Professor Valentina Ilieva Markova

### **1. General characteristics of the scientific and applied research activities of the candidate**

During the period 2012 – 2019 Senior Assistant Professor Hristo Jivomirov Karaivanov works in the field of analog circuits and electrical measurements. He earned his PhD in 2016 in the field of “Theoretical foundation of Communication Technology “. He has a published monography and five publications indexed by Scopus. He has participated in 10 scientific projects.

### **2. Assessment of the pedagogical background and activity**

Senior Assistant Professor Hristo Jivomirov Karaivanov works in the department of “Theoretical and Metering Electrical Engineering” since 2012. He teaches in the laboratory courses of “Electrical Measurements” and “Measurements in Electronics”, lectures “Measurements in Electronics”. He is a coauthor of four educational and methodical manuals. During his whole teaching career, he has been a curator of 10 graduate students.

### **3. Key scientific and applied contributions**

The candidate’s contributions are of both scientific and applied nature. A monographic work titled “Spectral analysis and synthesis in the modern measurement practice” is presented, which examines problems of processing of electrical signals. The fundamental concepts as spectral analysis and synthesis of signals are reviewed in detail, in the already mentioned monographic work.

Outside the frame of the monographic work the candidate proposes 11 publications, 5 of which are published in officiated editions and indexed in worldwide scientific databases. The last 6 publications are presented in national conferences in Bulgaria. The contributions in this section have applied nature and apply to the development of software functions in the field of signal

processing, generation of noisy signals and evaluation of the power parameters of a Class B amplifier.

The published papers are cited in 7 publications by various authors.

#### **4. Significance of the contributions in science and practice**

The candidate's contributions in his scientific work are significant and apply to the solving of problems in the scientific and applied fields.

The minimal national requirements, for occupying an academic position "Associate Professor" at Technical University of Varna, are covered. One monographic and 11 scientific publications are presented, of which in 5 the candidate is a sole author.

#### **5. Critical remarks and recommendations**

By my judgement the candidate has a scientific potential and due to this I'll add some critical notes and recommendations for his future work.

1. The documents for the current competition are not well formatted. There are no clear claims for research, scientific and applied contributions.
2. The candidate has a substantial amount of scientific assets of 28 scientific works outside of this PhD thesis, of which only 11 are presented within the current application.

### **CONCLUSION**

The applied documents by the candidate to this competition for academic position "Associate Professor" comply with the requirements of ADASRB, the rules of Technical University of Varna.

Based on the aforesaid, I find myself in right to propose Sen. Asst. Prof. Hristo Jivomirov Karaivanov to be awarded the academic position of "Associate Professor" in the field 5.2 "Electrical engineering, electronics and automation" at Technical University of Varna.

Date: 29.10.2019г

Jury Member: .....

/Assoc. Professor Valentina Markova, PhD/