

# EVALUATION

of the application package submitted for participation in the competition for a **tenured track position "Associate Professor"**, in professional area **5.2 "Electrical Engineering, Electronics, and Automation"**, the academic course on **"Digital Signal Processing"**, in Dept. of Electronics and Microelectronics, at the Faculty of Computer Engineering and Automation, Technical University of Varna, announced in the Bulgarian State Gazette №31/19.04.2022.

Member of the scientific panel: **Prof. Todor Dimitrov Ganchev, PhD**

## 1. General characteristics of the research activity of the candidate

Eng. Firgan Feradov, Ph.D., participates in the competition for the tenured position "Associate Professor" with a total of 19 scientific publications, incl. 11 satisfying the minimum national requirements under the group of indicators "B" and eight under the group of indicators "G".

To satisfy the requirements under indicator "B.4" (equivalent to a habilitation thesis), the candidate provided a list of 11 publications indexed in Scopus. Five are articles in scientific journals with an impact factor, and the other 6 are papers presented at scientific conferences with international participation. All publications grouped in category "B.4" are co-authored with colleagues from TU-Varna and/or foreign scientists. Assuming that the order of authors can indicate the candidate's contribution to individual publications, it should be noted that Dr. Feradov is the first author in 4 publications, second in 2, third in 4 and third in 1 fourth author, which is an indication of his significant contribution in carrying out these research activities.

The applicant submitted two lists with a total of 8 publications to satisfy the requirements under the group of indicators "G". Among these, seven publications are listed under indicator "G.7" (publications indexed in the Scopus database), incl. 5 authored by him as a sole author. In order to satisfy the requirements of the indicator "G.8", he provided one co-authored article published in a journal not indexed in Scopus. Among the three co-authored publications in the indicators "G" group, Dr. Feradov is the first author in 2, and in 1 is the third author. All said indicates his significant contribution to these research activities.

In accordance with the national requirements, the applicant has provided two lists: (i) a list of his publications used for earning his Ph.D. degree (a total of 8 publications), and (ii) a list of 4 papers used in the acquisition of the academic position "Chief Assistant Professor". No duplication has been found with the lists submitted in the current application.

To fulfill the minimum national requirements under the indicators group "D", the candidate has provided a list of 10 citations.

According to the bylaws of TU-Varna, Dr. Feradov provided a list of references certifying that in the last three years, he has taught 254 hours of lectures (indicator "Zh").

**Table 1.** A summary on the implementation of the minimum national requirements for acquiring the tenure track position "Associate Professor" by groups of indicators for the scientific field "5. Technical Sciences."

<b>Group of indicators</b>	<b>Contents by indicators</b>	<b>Minimum requirements for "Associate Professor"</b>	<b>Points F. Feradov, Ph.D.</b>
<b>A</b>	Indicator 1	50	50
<b>B</b>	Indicator 3 or 4	100	165
<b>G</b>	Sum of indicators from 5 to 11	200	244
<b>D</b>	Sum of indicators from 12 to 15	50	100
<b>Zh</b>	Indicator 29	30	254

The overall analysis of the submitted application package and the comparison with the minimum national and institutional requirements for the tenure track position "Associate Professor" (cf. Table 1) show that the candidate, Dr. Feradov, fulfills the minimum requirements in all groups of indicators.

Dr. Feradov's participation in 13 research and educational projects makes an excellent impression of his research excellence. Among these are 2 international projects, 5 financed by national funds and programs (FNI, NIF, OP HRD), and 6 financed by the Sector "Internal Projects" of TU-Varna.

Dr. Feradov's participation in the organizing committees of scientific conferences indicates that his research has been noticed in the scientific community.

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

The pedagogical activity of Dr. Feradov covers five years – from his appointment as an assistant to the Department ETM in 2018 until the present. According to the submitted application, for the last 3 academic years, the candidate has conducted 254 hours of lectures. This covers three academic courses in the bachelor' and 1 in the master's curricula of the Faculty of Computer Engineering and Automation of TU-Varna. The above is a very good attestation of his work as a teacher.

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

Based on the provided resumes of publications, I can conclude that most of the contributions are methodical and applied research. In my opinion, these publications correspond well to the research area of this competition. In summary, the author's contributions can be summarized as follows:

- Circuit designs and investigations for a valuable increase of knowledge concerning designing and evaluating the operation of power electronic circuits.
- Research and analysis aimed at obtaining new or confirmatory facts in recognition of physiological conditions and synthesis of new methods related to biomedical signal processing (PPG, ECG, EEG) in information storage and processing systems.

Considering the composition of the research teams in the co-authored publications and that Dr. Feradov authored many of the publications presented in the competition as a sole author, I can conclude that the candidate has significantly contributed to these research results.

#### **4. Significance of contributions to science and practice**

Regarding the significance of the contributions formulated in the monograph and publications, I can judge only indirectly based on the citations by independent authors. On the one hand, it is evident that the contributions are primarily related to important applied research problems, but on the other hand, the relatively small number of references (10), mainly in publications by three independent teams, is apparent. No information about submitted patent applications or patents issued was provided.

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

The application package is comprehensive and well structured, and the provided evidence is easy to verify. I have no critical remarks.

#### **CONCLUSION**

The application package submitted by Eng. Firgan Feradov, Ph.D., in the competition for the tenured track position "Associate Professor", provides an opportunity for an objective and multifaceted assessment of his qualifications. A formal comparison of the presented assets with the minimum national requirements for occupying the tenured position "Associate Professor" and the relevant bylaws of TU-Varna shows that the minimum requirements are met. The above said motivates me to express support for the candidate, Eng. Firgan Feradov, Ph.D., for being awarded the "Associate Professor" position in the professional field "5.2. Electrical engineering, electronics and automation", the academic course on "Digital signal processing".

Date: 31.08.2022

MEMBER OF THE SCIENTIFIC PANEL: \_\_\_\_\_

/ Prof. Todor Ganchev, PhD /