

# OPINION

*from*

***Prof. D.Sc. Eng. Raycho Todorov Ilarionov***

***Technical University of Gabrovo***

***Faculty of Electrical Engineering and Electronics***

***Department "Computer Systems and Technologies"***

**regarding the materials submitted for participation in a competition**

**for the academic position "Associate Professor"**

**in the field of higher education – 5. Technical Sciences,**

**professional field 5.3. Communication and Computer Engineering**

**(Computer Systems, Complexes and Networks).**

In the competition for "Associate Professor", announced in the State Gazette, issue 96 of 11 November 2025, and on the website of Plovdiv University "Paisii Hilendarski" for the needs of the Department of "Electrical Power Engineering and Communications" at the Faculty of Physics and Technology, the candidate is Chief Assistant Professor Dr. Stanislav Mitkov Asenov from Plovdiv University "Paisii Hilendarski".

## **1. General presentation of the candidate.**

Doctor Eng. Stanislav Asenov is a graduate of the Technical University of Sofia - Plovdiv branch in the bachelor's program "Computer Systems and Technologies" (2006–2010). He completed the master's program in the same field at the University of Food Technology (UFT) - Plovdiv in the period 2013-2014. He defended his educational and scientific degree "**Doctor**" at the Plovdiv University "Paisii Hilendarski" in 2021.

Chief Assistant Professor Dr. Eng. Stanislav Asenov works in the Department of Electrical Power Engineering and Communications of the Faculty of Physics and Technology of the Plovdiv University "Paisii Hilendarski". From 2022 to the present, he has been a "chief assistant". He has lectured for the Bachelor's degree in the disciplines "Operating Systems", "Computer Periphery", "Multimedia and Office Systems", "Internet of Things", "Automotive Sensors", "Computer Systems and Technologies", "Communication Protocols in the Car", "Automotive Computer Modules", "Battery Systems for Electric and Hybrid Cars", "Computer Architectures", "Diagnostics of Computer Systems", "Power Supply Devices in Telecommunications", etc.

He has led exercises on "Power supply devices in telecommunications", "Operating systems", "JAVA programming", "Diagnostics of computer systems", "Computer networks", "Computer peripherals", "Computer architectures", "Information security", etc. for the bachelor's degree.

Doctor Eng. Stanislav Asenov is a co-author of a manual on "Microprocessor Technology" (electronic edition). He has participated in the development of 16 curricula.

He has supervised 20 graduate students, has been a reviewer of 16 diploma theses and has 13 joint publications with students.

## **2. Overview of the content and results in the presented papers**

The presented works can be attributed to the following thematic areas: IoT, wireless sensor networks, LoRaWAN-based low-power systems, energy-efficient sensor nodes, intelligent systems - publications (B 4.2, B 4.3, B 4.6, B 4.9, B 4.10), application of artificial intelligence and digital tools in engineering education in computer and telecommunications technology (B 4.1, B 4.4, B 4.5, B 4.7, B 4.8).

The candidate, Chief Assistant Professor, Dr. Eng. Stanislav Asenov, has submitted a total of 33 scientific papers, 1 Manual on Microprocessor Technology and has participated in 5 projects and 4 stages of the National Program "Young Scientists and Postdoctoral Fellows". Sixteen of the submitted scientific papers are referenced and indexed in world-renowned databases (Scopus).

The submitted publications are published in English (22) and in Bulgarian (11). The candidate's publications can be classified as follows:

- 16 scientific publications in journals that are referenced and indexed in world-renowned databases of scientific information (Scopus);
- 17 scientific publications in non-refereed journals with scientific review or in edited collective volumes;
- 13 of the publications the candidate is the first author.

I believe that the scientific production of the candidate, Chief Assistant Professor, Dr. Eng. Stanislav Mitkov Asenov, complies with the minimum national requirements.

## **3. Scientific and applied activity**

The candidate has participated in 3 research projects at the "Scientific Research Fund", "Modernization of Higher Education Institutions" and "National Plan for Recovery and Sustainable Development of the Republic of Bulgaria" and 4 projects "Young Scientists and PhD Students".

## **4. Implementation activity**

The candidate has not submitted any documents for business implementations. His implementation activities are in the learning process as follows:

- a laboratory stand of a wireless LoRaWAN sensor node with two microcontrollers was implemented, representing an effective educational and research platform for training in low-energy wireless sensor networks and LoRaWAN technologies. The platform supports the formation of sustainable engineering competencies related to energy-efficient design, battery-free power supply and modern IoT communications;
- a laboratory stand for a driver authorization system, based on real automotive components, representing an effective educational tool that combines professional diagnostics and experimental analysis;

- laboratory and experimental platforms have been developed that combine real hardware, simulation environments, and communication protocols for training in microcontrollers and embedded systems.

## **5. Contributions (scientific, scientific-applied, applied). Significance of contributions for science and practice**

In the attached habilitation report, Dr. Eng. Stanislav Asenov has summarized the main scientific, scientific-applied and applied contributions of 10 scientific publications, in editions that are referenced and indexed in world-renowned databases (Scopus), which have received over 10 citations. The candidate has not summarized them as scientific, scientific-applied and applied (a matter of presentation). Nevertheless, the presented contributions accurately reflect the scientific results. The contributions contain methods and algorithms, creation of new schemes, models and software.

I accept the candidate's contributions thus defined as scientific, scientific-applied, and applied. They also correspond to the materials provided for review.

## **6. Assessment of the candidate's personal contribution**

One of the indicators of the candidate's merits is his personal participation in the above-mentioned contributions. His scientific production is presented in national and international scientific journals and forums, which is a guarantee of the achieved results. The rich educational and scientific research activity is evidence of a high level of professional competence. The content of the materials in the competition speaks of a highly prepared specialist and leaves no doubt that the candidate's scientific and applied contributions are an independent work or a team work, but with his significant creative participation.

## **7. Critical notes and recommendations**

I have no significant critical notes regarding the documents submitted by the candidate. I can make some recommendations related to:

- increasing its participation in national and international projects;
- publishing in more specialized journals with an Impact Factor;

## **8. Personal impressions**

I do not personally know the candidate for associate professor. My impressions are from the materials presented.

## **9. Conclusion**

The scientific production that the candidate proposes in terms of volume and content for participation in the competition is sufficient as teaching and research work and significantly exceeds the minimum requirements for holding the position of "Associate Professor".

**Considering the above, I propose that Chief Assistant Professor Dr. Stanislav Mitkov Asenov be elected as an "Associate Professor" in the field of higher education – 5. Technical Sciences, professional field 5.3. Communication and Computer Engineering (Computer Systems, Complexes and Networks).**

16 February 2026 г.  
Gabrovo

Member of the Scientific Jury: .....  
/Prof. D.Sc. Eng. R. Ilarionov/