

OPINION

by **Assoc. Prof. Rosen Stefanov Ivanov**, Technical University – Gabrovo, Department of "Computer Systems and Technologies"

(academic position, scientific degree, full name, higher education institution, scientific organization)

of the materials submitted for participation in the competition

for the academic position of "associate professor" in

field of higher education - 5. Technical Sciences,

in the professional field - 5.2. Electrical Engineering, Electronics and Automation, specialty - "Automated Information Processing and Control Systems" (Technical means for automation, Design of control systems).

In the competition for associate professor, announced in the State Gazette, issue 48/13.06.2025 and on the website of TU-Gabrovo for the needs of the Department of AIUT at the Faculty of EE, Senior Assistant Professor Dr. Eng. Georgi Ivanov Mihalev is participating as a candidate.

1. Overview of the content and results of the submitted works

A total of **46** works were submitted for the competition, of which:

- 44 scientific publications.
- 1 textbook.
- 1 teaching aid.

Referenced and indexed publications (11):

- 1 article in a publication with SJR.
- 10 publications in world-renowned scientific databases.

Non-referenced publications with scientific review (33):

- 8 publications in journals.
- 25 publications in edited collective volumes.

Independent publications (4):

- 2 referenced and indexed in Scopus.
- 1 in a journal.
- 1 at an international conference.

Co-authored publications (40):

- In 14 of them, the candidate is listed first.
- In all joint publications, the contribution of the co-authors is equal.

Detailed classification of publications:

- Articles in journals with SJR (WoS) – **1** [B.4.1].
- Reports in refereed and indexed databases in Bulgaria – **8** [B.4.2 – B.4.9].
- Reports in refereed and indexed databases abroad – **2** [B.4.10, B.4.11];
- Articles in non-refereed publications in Bulgaria – **8** [G.8.13, G.8.14, G.8.19, G.8.21, G.8.22, G.8.23, G.8.24, G.8.29].
- Papers at international conferences in Bulgaria – **20** [G.8.1 – G.8.12, G.8.15 – G.8.18, G.8.20, G.8.25, G.8.27, G.8.28, G.8.30].
- Reports at national conferences in Bulgaria – **4** [G.8.26, G.8.31 – G.8.33].

Citations

There are **15 citations** with the following distribution:

- 3 in journals with IF.
- 2 in journals with SJR.
- 2 in foreign journals without IF and/or SJR.

- 8 at national conferences.

Teaching materials:

- 1 textbook (co-authored).
- 1 exercise book (independently).

Conclusion

The scientific data of Senior Assistant Professor Georgi Ivanov Mihalev meets the national requirements and the minimum requirements of TU-Gabrovo for the academic position of "associate professor".

2. General description of the candidate's activities

2.1 Teaching and pedagogical activity (work with students and doctoral students)

Dr. Georgi Ivanov Mihalev began teaching at the Department of AIUT at TU-Gabrovo in 2017 as an honorary lecturer, after which he acquired the academic position of assistant. From 2019 to the present, he has held the position of senior assistant in the same department.

Teaching disciplines

The candidate has **lectured** on the following subjects: "Higher Mathematics I," "Higher Mathematics II," "Technical Means for Automation," and "Informatics."

The **laboratory exercises** he conducted included the following subjects: "Applied Programming," "Control System Design," "Computer Programming and Use," "Real-Time Control Systems," "Informatics," "Higher Mathematics I," "Higher Mathematics II," and "Training Practice."

He has supervised course projects in the subjects "Technical Means for Automation" and "Control Systems Design."

Working with graduates

Since 2017, Senior Assistant Professor Georgi Ivanov Mihalev has supervised 33 theses, reviewed 44 theses, and served on thesis defense committees.

2.2 Scientific and applied scientific activity

Senior Assistant Professor Georgi Ivanov Mihalev has participated in seven university research projects at the Technical University of Gabrovo's Center for Scientific Research and Innovation:

1. Project No. D1629E: "Development and research of a system for the protection of classified information in automated information systems and networks", 2016 – 2017.
2. Project No. 1710E: "Development of a smart medicine dispenser with architecture ensuring the protection of personal information," 2017–2018.
3. Project No. 1917E: "Development and research of systems for the protection of classified information in automated information systems and networks", 2019 – 2020.
4. Project No. 2010E: "Research on methods and solutions for the security of cyber-physical systems in Industry 4.0," 2020–2022.
5. Project No. 2219U: "Electronic voting at the Technical University – Gabrovo," 2022–2023.
6. Project No. 2217M: "Research and optimization of an automated electrohydraulic system with intelligent control," 2023–2024.
7. Project No. NIP2025-1: "Methodology for the use of generative artificial intelligence in the preparation of scientific publications," 2024–2025.

2.3 Implementation

The candidate has not submitted documents proving implementation. From publications G.8.1, G.8.2, G.8.4, G.8.6, G.8.7, G.8.15, it can be concluded that industry-applicable control controllers and automated systems have been developed.

3. Contributions (scientific, scientific-applied, and applied). Significance of contributions to science and practice

Senior Assistant Professor Georgi Ivanov Mihalev has submitted a report on a total of 18 contributions. All contributions correspond to scientific field 5.2. Electrical Engineering, Electronics, and Automation.

I accept the stated contributions and classify them as follows:

- Scientific contributions – **9** (1, 3, 4, 5, 7, 8, 9, 12, 14).
- Scientific-applied contributions – **6** (2, 6, 10, 11, 13, 15).
- Applied contributions – **3** (16, 17, 18).

The contributions in the scientific papers are undoubtedly significant, which is confirmed by the contemporary nature of the issues studied. All scientific publications in referred and indexed databases are from the last 5 years. The results achieved are being put into practice.

4. Assessment of the candidate's personal contribution

The candidate's personal contribution can be judged by his publication activity. Of a total of **44** scientific publications:

- **4** are independent (B.4.10, B.4.11, G.8.27, G.8.29).
- First authorship: **14** (B.4.4, B.4.5, B.4.7, B.4.9, C.8.1, C.8.9, C.8.10, C.8.12, C.8.15, C.8.16, C.8.19, C.8.20, D.8.21, D.8.8.23);
- Second authorship: **13** (B.4.8, C.8.2, C.8.4, C.8.5, C.8.7, C.8.17, C.8.18, C.8.22, C.8.25, C.8.30, C.8.31, C.8.32, C.8.33).
- Third authorship: **12** (B.4.1, B.4.2, B.4.3, B.4.6, C.8.3, C.8.6, C.8.8, C.8.11, C.8.13, C.8.14, C.8.26, C.8.28).
- Fourth authorship: **1** (G.8.24).

The candidate's position as first author in 14 publications and sole author in 4 publications demonstrates a significant personal contribution to research work. It is particularly indicative that the two independent publications in referred databases (Scopus) are from 2025, which testifies to his ability to conduct independent scientific work at a high level.

5. Critical comments and recommendations

Publications G.8.20 and G.8.21 have almost identical content.

I recommend that Senior Assistant Professor Georgi Ivanov Mihalev focus his publishing activities on peer-reviewed journals with IF or SJR.

6. Personal impressions

Senior Assistant Professor Georgi Ivanov Mihalev presents himself as a competent specialist with broad scientific erudition in the field of automated control systems. He demonstrates the ability to conduct independent scientific research. His active publishing activity in recent years testifies to consistency and systematicity in scientific work.

7. Conclusion

In view of the above, I propose that Senior Assistant Professor Dr. Georgi Ivanov Mihalev be elected as "associate professor" in the field of higher education 5. Technical Sciences, professional field 5.2. Electrical Engineering, Electronics and Automation, specialty - "Automated Information Processing and Control Systems" (Technical Means for Automation, Control System Design).

October 20, 2025

Scientific jury member:

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/Assoc. Prof. Rosen Ivanov, PhD /