

OPINION

by Assoc. Prof. eng. Delyan Georgiev Genkov, PhD,
from Technical University - Gabrovo

of the materials, submitted for participation in the competition
for occupying the academic position "Associate Professor" in
field of higher education - 5. Technical sciences,
Professional field 5.3. "Communication and computer technology",
specialty - "Computer systems, complexes and networks" (Schematic technology,
Microprocessor technique)

on the competition for associate professor, announced in the State Gazette, no. 54 /
25.06.2024 г.

and on the TU-Gabrovo website for the needs of the "Computer Systems and Technologies"
department at the "Electrical Engineering and Electronics" faculty, as a candidate, Chief
Assistant Professor eng. Hristo Stefanov Kilifarev, PhD.

1. Overview of content and results in the presented works

The candidate has submitted a total of 33 publications for the competition, 16 of which are in Bulgarian and 17 in English. The independent publications are 7, and the remaining 26 are co-authored, with 6 of the published candidates being the first authors. There are 4 articles, one of which is referenced in the Scopus and WoS databases with an impact factor. Papers presented at conferences indexed in Scopus are 10, and 19 are in non-refereed editions. In addition, one textbook on the discipline "Schematics" from the curriculum for the Software and Computer Engineering specialty, and one study aid for the competition - "Manual for laboratory exercises on microprocessor technology" are presented.

The publications are divided into six main thematic areas:

- design and development of automated systems (7 publications);
- a specialized platform for managing video recordings in online training (1 publication);
- non-contact research of environments, materials and speed (17 publications);
- design and development of microcontroller-based systems providing local short-term weather forecast (4 publications);
- optimization of Big Data for electronic stores (1 publication);
- research in the field of electric vehicles (3 publications).

I am a co-author of 4 of the candidate's publications, they are excluded from the evaluations given in this opinion.

2. General characteristics of the applicant's activity

2.1. Educational and pedagogical activity

The candidate worked as a teacher in the "Automation, Information and Control Technology" department of TU-Gabrovo from 2002 to 2017 in the positions of "assistant", "senior" and "chief assistant". Since 2018, he and I have been working together in the "Computer Systems and Technologies" department, where he conducts classes - lectures, laboratory and seminar exercises in many disciplines in the "Bachelor", "Master" and "Professional Bachelor" educational degrees, among which: "Multimedia systems and Web-design", "Computer graphics", "Computer graphics systems", "Modeling and visualization of objects", "Computer animation", "Programming of embedded systems", "Circuit engineering", "Microprocessor engineering",

"Artificial intelligence", "Computer peripherals", etc. He is the author of a textbook on " Schematic technology" (paper and electronic edition) and a textbook - "Manual for laboratory exercises on microprocessor technology" (electronic edition). He participated in the development of 49 study programs in various disciplines and supervised 59 graduates. There are reviews of diploma theses and participation in committees for diploma defenses.

2.2. Scientific and scientific-applied activity

The candidate participated in one international project under the "Science and Education for Intelligent Growth" operational program and 6 university projects, one of which he was the leader of. Many of his publications have a practical focus and represent complete systems with the possibility of application in practice.

2.3. Implementation activity

Most of the applicant's developments have been developed to working prototypes, indicating that they are ready for integrations in different spheres of the world. In addition, Ch. assistant professor Kilifarev has developed numerous laboratory exercises and stands that are used in the students' training.

3. Contributions. Significance of contributions to science and practice

The presented contributions in the self-assessment of ch. assistant professor Hristo Kilifarev, Ph.D. are of a scientific-applied (7 issues) and applied (9 issues) nature, as well as scientific contributions (3 issues). I accept the statements made by the candidate and consider them as enough for assigning of the academic position Associate Professor.

4. Evaluation of the candidate's personal contribution

From all the 33 publications submitted for the competition, in 7 the candidate is single author, and the rest are co-authored with one or more colleagues. The candidate is capable of developing independent scientific activity, as well as successfully integrating into team developments. I know the candidate as a colleague and I am convinced that the results achieved from the research and development carried out were obtained entirely with his participation.

5. Critical notes and recommendations

I have no critical remarks on the presented materials. Recommendations include the future increase in publication activity in publications with an impact factor and leading of scientific research projects.

6. Personal impressions

I know Ch. assistant Eng. Hristo Stefanov Kilifarev, PhD ever since he was a student whom I taught. From then on, he was distinguished by interest in the field of computer technology and demonstrated deep knowledge in it. I participated in the defense committee of his educational and scientific degree "PhD". For more than 6 years, he and I have been colleagues in the "Computer Systems and Technologies" department, we have participated in joint projects and have co-authored publications. All of this gives me grounds to declare that the candidate possesses the necessary qualities and skills to occupy the academic position of "associate professor", according to the Law on the Development of the Academic Staff in the Republic of Bulgaria and the Rules for its Implementation, as well as the Rules for the Acquisition of Scientific Degrees and occupying academic positions at TU - Gabrovo.

7. Conclusion:

With the above in mind, I suggest

Ch. Assistant Hristo Stefanov Kilifarev, Ph.D., to be elected as "associate professor" in the field of higher education - 5. Technical sciences, professional direction - 5.3 Communication and computer technology, specialty - "Computer systems, complexes and networks" (Schematic technology, Microprocessor technique).

08.11.2024

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/Assoc Prof. Eng. Delyan Genkov, PhD/