



OPINION

by competition for the academic position of Associate Professor in
5.1 Mechanical Engineering (Robots and Manipulators)
announced in the State Gazette, issue 61 of July 29, 2025
with candidate: Dr. Georgi Tsvetanov Angelov, Chief Assistant
Member of the scientific jury: Petko Hristov Petkov, Doctor of Engineering
Sciences, Professor

1. General characteristics of the candidate's research and applied scientific activities

The candidate in the competition for "Associate Professor" in 5.1 Mechanical Engineering (Robots and Manipulators) at the Institute of Robotics - BAS, is Dr. Eng. Georgi Tsvetanov Angelov, Chief Assistant Professor at the "Robotized and Mechatronic Intelligent Systems" section. The candidate participates in the competition with 25 works, of which 1 monograph, 10 scientific articles in publications that are referenced and indexed in world-renowned databases with scientific information and 14 publications in non-refereed journals with scientific review or in conference proceedings. The monographic work is an independent publication of the candidate and is dedicated to modern service robotics. The topic of the dissertation for obtaining the scientific and educational degree "doctor" is in the field of the competition. The content of the works shows that the candidate has a sufficiently high qualification and works successfully in the field of robotics.

2. Main scientific and applied scientific contributions

The candidate's contributions are of a scientific-applied and applied nature. As noted above, the monographic work examines modern service robotics. The publications examine the construction of conceptual models and programming systems for user interface and control of service robots for training, including a web-based programming editor. Experiments have been conducted that confirm the possibility of developing key skills with the help of the developed software. The candidate is one of the initiators of creating a curriculum and programs for the specialty "Robot Programmer". A methodology for implementing a voice-controlled user interface that uses elements of artificial intelligence has been created and tested. I believe that the candidate's contributions are sufficient for acquiring the position of "associate professor".

3. Significance of contributions for science and practice

The interface developed by the candidate is oriented towards the natural interaction between man and machine, which plays an essential role in service robotics. This is especially valuable for people with specific needs who can use robotic assistants in their daily lives. The candidate's contributions in this area characterize him as a promising researcher with a desire to obtain new scientific results and implement them in specific software products. There is a sufficient number

of publications with scientific and applied contributions. Information is presented about 7 citations of the candidate's publications by Bulgarian and foreign authors. All indicators of the criteria for occupying the position of "associate professor" have been met, and the quantitative requirements have been exceeded.

4. Critical notes and recommendations

The candidate may be asked to increase publication activity in domestic and foreign journals so that his/her results can receive wider recognition from the scientific community.

CONCLUSION

Based on the contributions to the candidate's scientific works, his successful scientific research and applied activities, I find it reasonable to propose that Senior Assistant Professor Georgi Tsvetanov Angelov take up the academic position of "Associate Professor" in the professional field of Mechanical Engineering, specializing in Robots and Manipulators.

05.11.2025

Jury member:

/Prof. Dr.Sc. Petko Petkov/