

## OPINION

in a competition for the academic position of "Associate Professor" in the field of higher education 5. Technical sciences, professional field 5.2. "Electrical Engineering, Electronics and Automation", specialty "Application of the principles and methods of cybernetics in various fields of science", announced in the State Gazette no. 57 / 09.07.2021 with sole candidate: Denis Safidinov Chikurtev, PhD, ch. assistant at the Institute of Information and Communication Technologies, BAS

Member of the scientific jury: Assoc. Prof. Dr. Eng. Nikola Georgiev Shakev

### 1. General characteristics of the professional, research and applied scientific activity of the candidate

The candidate Denis Safidinov Chikurtev is currently a ch. assistant at the Institute of Information and Communication Technologies (IICT), BAS. Prior to that, he successively held the academic position of "Assistant" at IICT (2017-2019) and engineering and technical positions at IICT and the Institute of Systems Engineering and Robotics (ISIR), BAS.

In 2012 and 2014 he successively graduated with a bachelor's degree and a master's degree in "Automation, Information and Control Engineering" at the Technical University of Sofia. In 2017 he defended his dissertation at the IICT on the topic: "Research and control of service robots for human support" and obtained the educational and scientific degree Doctor of Electrical Engineering, Electronics and Automation.

In the materials of the competition for associate professor, describing his research activity, the candidate has presented 37 scientific publications. It can be clearly concluded that his research activity falls entirely in the field of competition. The candidate covers the national requirements for holding the academic position of "associate professor", as well as the requirements for the candidates for acquiring the academic position of "associate professor" in IICT. The evaluations for the separate groups of indicators are as follows:

**Group of indicators A** (reported 50 points / required 50 points) A doctoral diploma for a successfully defended dissertation on "Research and control of service robots for human support" was presented.

**Group of indicators V** (reported 131.5 points / required 100 points) 10 scientific papers are presented, in which the candidate is a co-author. The papers are published in journals and conference proceedings indexed in world-famous databases with scientific information.

**Group of indicators G** (reported 236.9 points / required 220 points) A total of 27 scientific publications were presented. 8 of them are papers that are referenced and indexed in world-famous databases of scientific information. The remaining 19 scientific publications are in unrefereed journals with scientific review or in edited collective volumes. Among the presented publications 2 are with a single author.

**Group of indicators D** (81 points reported / 60 points required) The attached documents for the competition contain information about known citations: 7 citations in scientific journals, referenced and indexed in world-famous databases with scientific information; 1 citation in monographs and collective volumes with scientific review; 4 citations in unrefereed journals with scientific review.

A review in the database with scientific information Scopus shows that as of 01.11.2021, citations not announced by the candidate are found. For example, publications [1], [5] and [14] have one unannounced citation, and publication [12] has 3 unannounced citations. This further shows a high level of relevance and scientific potential of the candidate's publications.

**Group of indicators E** (62 points reported / 20 points required) The applicant has participated in: 2 national scientific or educational projects, 1 international scientific or educational project, and has been the leader of 1 national scientific or educational project.

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

The main scientific and applied contributions contained in the scientific works of Denis Chikurtev are related to the development of algorithmic and technological solutions aimed at increasing the possibilities for using robots in various spheres of modern society. The emphasis is on the design of intelligent robots based on rich sensory information and innovative human-machine interface, which can be successfully and innovatively applied to non-industrial tasks - service robots, social robots and others.

The candidate has attached a reference for the original scientific and applied contributions, which includes 17 scientific contributions and 8 applied contributions. I accept the listed contributions, expressing the opinion that it would be more appropriate to summarize these contributions and reduce their number.

## **3. Critical remarks and recommendations**

I have no significant critical remarks on the materials submitted for participation in the competition. Regarding the research activity of the candidate, the participation in scientific projects and the publication of the obtained results in world recognized and refereed editions makes a good impression. I would recommend to Dr. Denis Chikurtev for his future academic development and publishing activity to pay attention to more independent publications that have their significance for the formation of the academic personality.

#### 4. Personal impressions

I know Denis Safidinov Chikurtev from his participation in scientific conferences, seminars and other scientific and technical events in the field of robotics and information technology. I support the opinion that despite his youth, with his activity and commitment to research, he is already a recognizable person in professional circles. I find his participation in a competition for the academic position of "associate professor" as an expected development of his academic career.

#### CONCLUSION

After getting acquainted with the presented scientific papers, their significance, the scientific and applied contributions contained in them, I can conclude that they fully meet the requirements for position "Associate Professor" according to ADAPRB, The Rules of its application and the Rules for holding academic positions at the Institute of Information and Communication Technologies. This gives me reason to recommend to the Scientific Jury and the Scientific Council of IICT-BAS to support the election of Ch. Assistant Professor Dr. Denis Safidinov Chikurtev for the academic position of "Associate Professor" in the professional field 5.2 "Electrical Engineering, Electronics and Automation", specialty "Application of the principles and methods of cybernetics in various fields of science".

Date 01.11.2021

Jury member:

**NOT FOR  
PUBLIC RELEASE**

/Assoc. Prof. Dr. Nikola Shakev/