

## OPINION

of Prof. Stoyan Kapralov DSc – Technical University of Gabrovo  
on the materials submitted for participation in the competition  
to occupy the academic position "professor"  
in a professional direction 5.2. "Electrical engineering, electronics and automation";  
scientific specialty "Application of the principles and methods of cybernetics in different  
areas of science"  
thematic area "Robotic systems with human-machine interface",  
announced by the Institute of Robotics of the BAS in State Gazette no. 26 of 21.03.2023  
for the needs of the Department "Interactive Robotics and Control Systems"

### 1. Brief biographical data

Maya Dimitrova was born in 1961 in Sofia. She completed secondary education at the First English Language High School in Sofia in 1980 and higher education at the University of St. Petersburg, majoring in Psychology in 1985. In 1994, she completed a master's program at the Faculty of Psychology at the University of Warwick, Great Britain.

In 2002, he successfully defended his dissertation on the topic "Adaptive human-computer interface" in the scientific specialty "Application of the principles and methods of cybernetics in various fields of science" at the Institute of Control and Systems Research - BAS.

From 2007 to the present, he has been an associate professor successively at the Institute of Control and Systems Research (2007-2010), the Institute of Systems Engineering and Robotics (2010-2017) and the Institute of Robotics, Section "Interactive Robotics and Control Systems".

### 2. General presentation of the materials for the competition. Compliance with the minimum requirements.

The candidate Maya Dimitrova participated in the competition with 27 scientific publications and five chapters in collective monographs.

The presented publications fall under the theme of the contest.

The analysis of the publications is presented in the following table:

Publication	Year	Authors Count	International Journal	Internat. Conf. abroad	Internat. Conf. in Bulgaria	Journal in Bulgaria	
4.1	2021	5	SJR=0,842, Q2				
4.2	2020	7			SJR=0,23		
4.3	2020	10	IF = 0,16, Q4				
4.4	2022	5		SJR =0,407, Q2			
4.5	2020	13	IF = 2,177, Q1, SJR=0,753				
4.6	2013	2	WoS				
4.7	2023	4		SJR=0,15, Q4			
4.8	2023	3		SJR=0,15, Q4			
4.9	2021	4		Scopus			
4.10	2023	8		Scopus			
4.11	2003	1	SJR=0,18, Q4				
7.1	1998	1	SJR=0,18, Q4				
8.1	2016	8		yes			
8.2	2016	9		yes			
8.3	2022	5			yes		
8.4	2021	3			yes		
8.5	2004	2				yes	
8.6	2003	2		yes			
8.7	2003	4		yes			
8.8	2000	3			yes		
8.9	2009	4			yes		
8.10	2011	1			yes		
8.11	2016	6		yes			
8.12	2022	1	yes				
8.13	2005	1			yes		
8.14	2015	2	yes				
8.15	2019	6	yes				
		TOTAL	9	10	7	1	

From the presented materials, it can be seen that the candidate Associate Professor Maya Dimitrova, PhD, meets the requirements of the Internal Rules for the Development of the Academic Staff of the Institute of Robotics at the Bulgarian Academy of Sciences.

Indicator group	Minimal No of points	Accumulated points by the contestant
A	50	50
B	100	191
Г	200	205
Д	100	824
E	150	345

In this way, the criteria of the Institute of Robotics at BAS are covered and in some cases – exceeded. Accordingly, the minimum national requirements according to the Regulations for the Implementation of the Law on the Development of the Academic Staff in the Republic of Bulgaria for the professional direction 5.2. "Electrical engineering, electronics and automation" are also fully satisfied.

I accept the contributions presented in the attached "Reference to Maya Dimitrova's Scientific Contributions". The content of the publications and scientific achievements, with which the candidate participates in the competition, is correctly reflected.

The scientific and scientific-applied contributions in the publications submitted for participation in the competition are:

- enrichment of existing knowledge;
- new approaches and methods;
- applications of scientific achievements in practice.

#### **4. Supervision of doctoral students and work on projects**

Assoc. Prof. Maya Dimitrova has two doctoral students, who successfully defended their theses.

In the period 2015-2023, Associate Professor Dimitrova worked on six research projects, in two of which she was the leader.



## **5. Critical notes and recommendations**

I have no critical notes and recommendations.

## **6. Personal impressions of the candidate**

I know Maya Dimitrova from her participation in the STEMEDU conferences.

After familiarizing myself with the materials and scientific works presented in the competition and based on the analysis of their significance and the scientific and scientific-applied contributions contained in them, I confirm that the scientific achievements meet the requirements of ZRASRB, PPZRASRB, the Rules for the Terms and Conditions for acquisition of scientific degrees and for occupying academic positions at the BAS and the Internal rules for the development of the academic staff of the Institute of Robotics at the BAS. In particular, the candidate satisfies the minimum national requirements in the professional direction and no plagiarism has been found in the scientific works submitted for the competition.

I give my positive assessment and recommend to the Scientific Jury to elect Associate Professor Maya Ivanova Dimitrova to the academic position "Professor" in professional direction 5.2. "Electrical engineering, electronics and automation"; scientific specialty "Application of the principles and methods of cybernetics in different areas of science", thematic area "Robotic systems with human-machine interface".

June 22, 2023

Reviewer:

(Prof. Stoyan Kapralov DSc)