

### OPINION

on the competition for awarding the academic position "Associate Professor" in professional field 5.3 Communication and computer technology, announced in State Gazette vol. 21/15.03.2022 with candidate: Elena Nikolaeva Paunova-Hubenova, PhD by Assoc. Prof. Antoniya Todorova Tasheva, PhD, Technical University of Sofia, appointed as a member of the scientific jury according to order 135/17.05.2022

# 1. General description of the research and applied research activities of the candidate

The only candidate in the competition is Elena Paunova-Hubenova PhD, who since 2018 is a chief assistant of the "Distributed information and control systems" section at IICT - BAS. The materials submitted by the candidate include certificates and diplomas, a list of scientific publications for participation in the competition, a list of citations, the 26 scientific publications for participation in the competition. The candidate meets the minimum sciento-metric requirements of the Law for the Development of the Academic Staff in the Republic of Bulgaria (LASRB) and the Regulations for the specific conditions for acquiring scientific degrees and for holding academic positions in IICT - BAS for the academic position "Associate Professor" in professional field 5.3 Communication and computer technologies, which can be seen from the table:

	Indicator	For AP Assoc. Prof.	For E. Paunova Hubenova
A B	Dissertation for the award of educational scientific degree "PhD"	50	50
Г	B4. Habilitation work - scientific publications (count: 10)  Γ7. Scientific publications - referenced (6 – 160 p.)	100	165
	18. Scientific publications - unreferenced (10 - 80 p)	220	240
Д	<ul> <li>Д12. Citations in peer-reviewed scientific journals (13 – 130 p.)</li> <li>Д14. Citation in unreferenced peer-reviewed journals (16, 22 π.)</li> </ul>	60	162
E	E18. Participation in a scientific or educational project (5 – 50 p.) E20. Management of a national research project (1 – 20 p.) E22. Raised funds for projects (4 p.)	20	74
		Min. 450 p.	691p.

- A. Elena Paunova-Hubenova holds a diploma of ESD "PhD" in the professional field 5.3. Communication and computer technologies, issued by the Institute of Information and Communication Technologies BAS in 2013 for successfully defended dissertation on the topic "Design and development of electronic games for students as a web-based service".
- Б. Not applicable
- B. There are 10 scientific publications replacing habilitation work, published in referenced and indexed editions in the world-famous databases with scientific information SCOPUS or Web of Science.
- Γ. A total of 16 publications are presented, of which 6 are published in referenced editions in the world-famous SCOPUS or Web of Science databases and one of them is indexed with indicator SJR 0.198. Two of the publications are with a single author the candidate.

- Д. The author's reference for the found citations provides correct information for 13 citations in referenced world-famous scientific journals and 16 issues in non-referenced journals with scientific review, which exceeds the minimum requirements many times.
- E. The applicant has submitted information for participation in 5 national scientific and educational projects. Elena Paunova-Hubenova is the head of the project "Data analysis for the integration of ICT resources in Bulgarian schools" at the National Research Fund.

## 2. Main scientific and scientific-applied contributions

The candidate has attached a reference for two scientific and four scientific-applied contributions, and to each of them she has attached a list of the publishing activity to them. Most of them are related to research and development for the application of ICT devices, resources and educational games in school education. I believe that the contributions completely fall within the field of the competition and I accept them in the form in which they are a summarized. I believe that the contributions are a result of the personal work of the candidate.

## 3. Significance of the contributions to the science and practice

The candidate's participation in many scientific and applied projects with business and state institutions makes a good impression. The candidate E. Paunova-Hubenova is also the head of the project "Analysis of data on the integration of ICT resources in Bulgarian schools" at the National Research Fund in the competition Young Scientists in 2016. The candidate has participated as a consultant in the study "Impact Assessment of distance learning in an electronic environment or other absentee forms on the effectiveness of school education", conducted in 2020 by order of the Ministry of Education and Science.

The candidate also presents evidence of his participation in the development and research of the application of modern technologies for the implementation of precision animal husbandry, which is also a topic of wide public importance.

It is obvious that the candidate works consistently on current issues in the field of ICT and its contributions have a direct application in science and practice.

#### 4. Remarks and recommendations

I have no critical remarks about the candidate. I would recommend to Elena Paunova-Hubenova for her future academic development and publishing activity to pay attention to more separate publications.

#### 5. Conclusion

After my acquaintance with the documents for the research activity of the candidate and analysis of the scientific works presented at the competition, their significance and the scientific and scientific-applied contributions contained in them, I give a **positive** assessment of the application. I find it reasonable to propose to the Honorable Scientific Jury and to the Scientific Council of IICT-BAS to support the election of Senior Assistant Professor Elena Nikolaeva Paunova-Hubenova, PhD, for the position of "Associate Professor" in the

professional field 5.3 Communication and computer technologies for the needs of the section "Distributed information and control systems".

Sofia

23.06.2022

Signature:

HA OCHOBAHNE,