

# REVIEW

of Assoc. Prof. Desislava Ivanova Paneva-Marinova, PhD

by competition for holding the academic position “**Professor**”

professional field 4.6 “Informatics and Computer Science”, scientific specialty “Informatics”  
(Systems for management of digital cultural content and e-learning)

**Reviewer: Acad. Ivan Petkov Popchev – BAS**

Based on a decision of the Scientific Council of IMI – BAS (Protokol № 1 of 22.01.2021) with Order № 12/29.01.2021 of Director Acad. V. Drensky I have been appointed a member of the Scientific Panel for a competition for the academic position “Professor” in the professional field 4.6 “Informatics and Computer Science”, scientific specialty “Informatics” (Systems for management of digital cultural content and e-learning), announced in SG № 102/01.12.2020.

As a reviewer, I have received all the documents submitted for participation in the competition.

According ADASRB, Regulation for application of ADASRB (Degree № 26 of 13 February 2019) and Regulation for application of ADASRB in IMI – BAS, candidates for academic position “Professor” must meet certain conditions.

Art. 29(1) Candidates to take academic position “Professor” must meet the following conditions:

1. To have acquired the educational and scientific degree of Doctor...;
2. To have occupied the academic position of Associate Professor in the same or in another higher school or scientific organization for not less than two academic years...;
3. To have presented a published monograph or equivalent publications in specialized scientific issues..., which do not reproduce those presented for awarding the educational and scientific degree of Doctor and for awarding of the scientific degree of Doctor of Science and for occupying the academic position of Associate Professor;
4. To have presented other original scientific-research works, publications, inventions, and other scientific and scientific-applicable works or artistic creative achievements, to be assessed together;
5. To meet the minimum national requirements and the requirements under Art. 2b, Para. 2 and 3, respectively to the requirements under Art. 2b, Para. 5;
6. To have no plagiarism proven as per the legally established order in the scientific works.

(3) The candidates shall submit a reference on the fulfillment of the minimum national requirements under Art. 2b, Para. 2 and 3, respectively the requirements under Art. 2b, Para. 5, and a reference of the original scientific contributions to which shall be attached the relevant evidence laid down in this Act, in the Regulations for its implementation and the regulations of the higher schools and of the scientific organizations.

According to the Regulations for application of ADASRB in IMI – BAS in Art. 3 (1).3 from the publications submitted for participation in a competition for the academic position “Professor”, the candidate must have at least 10 publications in scientific editions with IF or SJR.

**Assoc. Prof. Desislava Paneva-Marinova, PhD, meets the conditions of Art. 29(1).1** as she presented the Diploma of the Higher Attestation Commission for the educational and scientific degree “Doctor” №32881, Sofia, 29.01.2009.

**Assoc. Prof. Desislava Paneva-Marinova, PhD, meets the conditions of Art. 29(1).2** according to the presented official certificate letter ref. № 654/09.12.2020 by Director Acad. V. Drensky in the assurance that she has a total work experience of 18 years 7 months and 7 days and she is Associate Professor from 13.12.2013.

**Assoc. Prof. Desislava Paneva-Marinova, PhD, meets the conditions of Art. 29(1).3** as she has presented 20 publications in specialized scientific editions, which do not repeat the ones presented for acquiring the educational and scientific degree “Doctor” and for holding the academic position “Associate Professor”. “References from Web of Science and Scopus” are given for the presented publications in the competition.

Assoc. Prof. Desislava Paneva-Marinova has a total number of 133 publications.

The analysis of **20 publication on the competition** showed the following:

- 1 publication is in a journal with IF (№ 4);
- 3 publications are in journals with SJR (№№ 3, 7 and 8);
- 14 publications are in Proceedings with SJR (№№ 1, 2, 5, 6, 9, 10, 11, 12, 13, 14, 15, 16, 17 and 18);
- 2 publications are a book chapter or a collective monography (№№ 19 and 20).

All publications are co-authored and in English.

The presented “**List of noticed citations**“ in Web of Science and/or Scopus or other scientific editions includes a total of 371 citations.

The “**List of citations, presented for applying the completion**” includes 31 citations of 16 papers, some of the papers have been presented in previous procedures.

**Assoc. Prof. Desislava Paneva-Marinova, PhD, meets the conditions of:**

- **Art. 29(1).4** as she has presented other original research papers, publications, ... and other scientific and applied research works – participation in 10 projects and 6 implemented systems for management of digital cultural content and digital educational products.
- **Art. 29(1).5** as **she meets the minimum national requirements** under Art. 2b, para. 2 and 3, respectively to the requirements under Art. 2b, para. 5. A reference for fulfilment of the minimum national requirements is presented.
- **Art. 29(1).6** as **there is no legally evidenced plagiarism in scientific papers.**

The “**References for other activities in the period 2015 – 2020**“ begins with **the research work of Assoc. Prof. Desislava Paneva-Marinova, PhD**, and includes: 34 reports to international scientific events, 6 reports to seminars in foreign universities, 12 reports to national scientific events, 8 reports to seminars in our country, 3 participations in scientific projects, funded by EC FP, Erasmus, etc., 8 participations in scientific projects, funded by external sources for BAS, incl. being a coordinator in 1 project, 4 participations in EBR projects and projects under bilateral or multilateral scientific cooperation, incl. being a project coordinator of 2, creation of 2 online educational products, leading designer and developer of 5 systems for management of digital cultural content, editor of Proceedings, indexed in Web of Science and/or Scopus, guest-editor of a journal, published by IMI - BAS.

**Assoc. Prof. Desislava Paneva-Marinova, PhD**, presents the following **educational work**: supervisor of 1 defended doctoral student, supervision of 6 doctoral students, participation in 29 examination commissions, lecturing and management of exercises in 3 universities. Respectively the **scientific and organizational activity** is with participation in the Scientific Council of IMI – BAS and in commissions of the Scientific Council of IMI – BAS, management of department, laboratory and scientific seminar in IMI – BAS, membership in 3 professional organizations, scientific secretary of 10 scientific forums, member of committees of 6 scientific forums. The **expert activity** includes 3 reviews for “Doctor” degree, 3 opinions for “Doctor” degree and 1 review of a monograph.

The short list of these activities shows that **Assoc. Prof. Dr. Desislava Paneva-Marinova has significant administrative and managerial experience, as well as good communication skills and competencies, and all this is a prerequisite for further successful perspective development.**

According to Art. 29(3) the candidate shall submit a “Reference for the original scientific contributions”. Assoc. Prof. Desislava Paneva-Marinova, PhD, presented a “**Reference for the original contributions**” in volume of 10 pages.

Briefly **the contributions** can be summarized as follows:

1. An algorithm for complex search of information objects in a digital library is created (№ 20).
2. An ontology for Orthodox iconographic art is developed. The field is presented through formal, machine-readable descriptors, relations, and rules (№ 20).
3. **Bulgarian folklore ontology** is created with additional digital library functionality developed for management of **structures for folklore knowledge** (№ 12).
4. An exemplary model for a multifunctional ecosystem of digital cultural assets is presented (№№ 3 and 13).
5. A model is created for monitoring and management of transport processes for collecting, processing, and analysis of Big Data with the application of optimizing algorithms for knowledge extraction from data and the prediction of future results (№ 4).
6. An approach in learning about ancient history and civilization, through the combination of “storytelling” and “serious educational games” is proposed. (№№ 1, 8 and 11).
7. A model of a serious game in a panoramically photographed ancient architectural archeological complex is developed (№ 11).
8. A framework for creation and support of the so-called “onlife” communities of user of digital tools, like eShadow, for learning and creativity, is proposed (№ 18).
9. An approach for creative **integration of the Fine arts with the Western and Eastern pedagogical methods in a 3D virtual museum “Mathematics and Arts”** is created (№ 7).
10. The “**Human calculator**” theatrical game is developed. It gives students the opportunity to learn the binary representation of the numbers, using their bodies, and discover the algorithms for addition, subtraction, multiplication, and division (№ 17).

As a generalized “**scientometric identity**” of Assoc. Prof. Desislava Paneva-Marinova, PhD, the world’s scientific databases show the following:

- **Scopus**: 46 documents, 107 citations, h-index 6;
- **Web of Science**: 30 total publications, 50 citations, h-index 4;
- **Scholar.google**: 858 references, h-index 16, i10-index 35;
- **Research Gate**: RG Score 6.28, h-index 9, h-index 6 excluding self-citations.

The „scientometric identity“ shows that the successful research activity must be a subject to mandatory self-analysis, new research guidelines and **an independent publishing activity in journals with IF.**

Assoc. Prof. Desislava Paneva-Marinova, PhD, **has fulfilled** all the requirements for holding the academic position of “**Professor**” in the Regulations for application of ADASRB in IMI – BAS in Art. 3 (1).3.

## CONCLUSION

All conditions according to ADASRB, Regulations for application of ADASRB and the Regulations for application of ADASRB in IMI – BAS are met and I gave a definite **positive** conclusion for the election of Assoc. Prof. Desislava Paneva-Marinova, PhD, in a competition for the academic position “Professor” in a professional field 4.6 “Informatics and Computer Science”, scientific specialty “Informatics” (Systems for management of digital cultural content and e-learning).

I propose that the Scientific Panel unanimously vote on the proposal to the Scientific Council of IMI – BAS to elect Assoc. Prof. Desislava Paneva-Marinova, PhD, for the academic position of “**Professor**” in the professional field **4.6 “Informatics and Computer Science”**, scientific specialty “Informatics” (Systems for management of digital cultural content and e-learning).

23.02.2021

Reviewer:.....

Acad. Ivan P. Popchev