O P I N I O N

**on a competition for the academic position of "Associate Professor"
in the field of higher education 4. Natural Sciences, Mathematics and Informatics,
professional field 4.6 Informatics and Computer Science, scientific specialty "Informatics"
(Digital Cultural Content Management Systems and E-Learning),
announced in the State Gazette, No. 103/02.12.2025**

The opinion was prepared by Prof. Dr. Tatyana Atanasova, Institute of Information and Communication Technologies at the Bulgarian Academy of Sciences, as a member of the scientific jury of the competition, according to Order No. 9/30.01.2026 of the Director of IMI-BAS.

Only one candidate submitted documents for participation in the announced competition: Dr. **Maxim Krasimirov Goynov,** Assist. Prof. at the Institute of Mathematics and Informatics.

I. General description of the materials presented

1. Application details

The documents submitted by the candidate under the competition comply with the requirements of the Act on Scientific Studies and Research, the Regulations on the Conditions and Procedure for Acquiring Scientific Degrees and Occupying Academic Positions at IMI-BAS. For participation in the competition, the candidate Dr. Goynov has submitted 22 titles from the general list of 65 publications. The proposed 22 sources are classified by topic, type of publications and according to indexing in world scientometric databases (Scopus, Web of Science, ACM). Of the scientific publications submitted for the competition, 15 are SJR and/or IF. The general list of noted citations of the candidate's works contains 179 citing sources. According to the reference in Scopus, Dr. Goinov has *an h-index* of 6, and the metric in the Web of Science Core Collection is *H-Index* 4.

The minimum requirements of the candidates for participation in the competition for the academic position of "Associate Professor" at IMI-BAS are met with overlap. Participation in 16 research projects is indicated, in 15 of which Maxim is the main developer.

2. Applicant details

Maxim Goynov acquired an educational and scientific degree "Doctor" in 2016. He has been an Assistant Professor at the Institute of Mathematics and Informatics of the Bulgarian Academy of Sciences for nearly 5 years. Assist. Prof. Dr. Maxim Goynov was awarded the First Prize of the Ministry of Education and Science for overall contribution to open science "ORBIT" 2025.

Dr. Goinov is a designer and developer of implemented in Bulgaria systems for managing digital cultural content and digital educational products.

3. General characteristics of the candidate's scientific works and achievements

The scientific papers meet the minimum national requirements (under Article 2b, Paragraph 2 and 3 of the Act on Scientific Studies and Research, Article 53 of the Regulations of the Act on Scientific Studies and Research) and respectively the additional requirements of the Bulgarian Academy of Sciences for occupying the academic position of "Associate Professor" in the scientific field and professional field of the competition. The scientific papers submitted by the candidate do not repeat those of previous procedures for acquiring a scientific title and an academic position. There is no plagiarism proven by law in the scientific papers submitted under the competition. In five of them he is the first author. I assume that the contribution of the candidate in the submitted collective publications is comparable and commensurate with that of the other authors.

4. Meaningful analysis of the scientific and applied scientific achievements of the candidate contained in the materials for participation in the competition

The main thematic areas that summarize the presented works are in the integration of modern information technologies – such as semantic modeling, 3D reconstruction and immersive games – in digital cultural ecosystems. I would like to note this concept (digital cultural ecosystems) as a contribution of the entire scientific team and Dr. Maxim Goinov in particular, because these systems facilitate the creation, preservation, re-evaluation of digital cultural heritage and at the same time stimulate educational and innovation efforts.

The contributions in the publications submitted for participation in the competition are related to the development of interconnected, technologically determined environments that integrate digital cultural assets, and can be systematized as:

- Advanced semantic and digital cataloguing;
- Innovative 3D modeling and content management;
- High-performance library systems;
- Standardization of typologies and semantic description of digital objects for structuring an online database of South Slavic manuscripts;
- Digital repertory of medieval manuscripts;
- Tools for detailed paleographic analysis;
- Interoperability between digital libraries by combining content from specialized libraries – "Encyclopaedia Slavica Sanctorum" and "Bulgarian Iconographic Digital Library";
- Digitization of scientific literature;
- Solutions for personalized viewing of content in virtual museums;
- Development of context-based services for search and intelligent data management and statistical analysis of user behavior when using digital services;
- Pedagogical transformation through serious games and learning models through digital cultural heritage.

The overall activity of the applicant is aimed at developing innovative approaches and technological solutions for the integration of digital cultural assets - such as virtual museums, libraries and archives - in order to improve content management, accessibility and user experience. Efforts to digitize written heritage by providing tools for greater adaptability and effective interaction between the researcher and the digital repertoire are very valuable.

An extremely important step for the digitization and structuring of cultural heritage is the development of a three-stage descriptive model for a machine-readable description of medieval South Slavic manuscripts, which allows automated processing, data exchange between institutions and easier search in large amounts of information, covering identification, description and paleography.

Dr. Goynov's innovative approach is 3D reconstruction using the developed methodology for transforming 2D images into web-optimized 3D models using open source tools.

5. Critical remarks and recommendations

I have no comments on the competition documentation. The documents submitted by the applicant are logically arranged and precisely drafted. From the documents, I can judge that Dr. Maxim Goynov is an established researcher in the field of digital humanities and cultural heritage management.

6. Conclusion on the application

After I got acquainted with the materials submitted under the competition and on the basis of the analysis of their significance and the scientific and applied contributions contained in them, I give my positive assessment of the candidacy of Assist. Prof. Dr. Maxim Goynov for occupying the academic position of Associate Professor in the professional field and the scientific field of the competition.

II. Conclusion

Based on the above, I strongly recommend that the Scientific Jury propose to the Scientific Council of the Institute of Mathematics and Informatics at the Bulgarian Academy of Sciences to elect Assist. Prof. Dr. Maxim Krasimirov Goinov for Associate Professor in the professional field 4.6 Informatics and Computer Science, scientific specialty "Informatics" (Systems for Management of Digital Cultural Content and E-Learning).

26 March 2026 Prepared the opinion:.....

(Prof. Dr. Tatyana Atanasova)