

OPINION

Dr. Ivan Radoslavov Georgiev
in the competition for academic position "Associate Professor"
in the professional field 4.6 "Informatics and Computer Science"
specialty "Informatics"

Reviewer: Prof. Stefka Stoyanova Fidanova

By Order No 186 of 07.04.2023 of the Director of the Institute of Mathematics and Informatics at the BAS, Prof. Petar Boyvalenkov on the grounds of Art. 2, para. 2 of the law and the decision of the Scientific Council of IMI-BAS (Minutes No. 3 of 17.03.2023). I was appointed a member of the scientific jury under the procedure for the academic position of "Associate Professor" in the professional field 4.6 "Informatics and Computer Science", scientific specialty "Informatics", announced for the needs of section "Information Modeling" in the State Gazette No. 14/10.02.2023. As a member of the Scientific Jury I have received all the documents attached to the application to the Director of IMI-BAS of the only candidate for the competition, Dr. Ivan Radoslavov Georgiev.

According to the Law on the Development of the Academic Staff in the Republic of Bulgaria, the regulations for its implementation and the specific requirements introduced in the regulations of IMI-BAS, applicants must meet the following requirements:

1. Have acquired a doctorate degree in education and science;
2. Have held the academic position of "Associate Professor" at the same or another higher education institution or scientific organization for at least two academic years;
3. Have submitted published monographs or equivalent publications in specialized scientific editions which do not repeat the ones submitted for the acquisition of the educational and scientific degree "Doctor", the scientific degree "Doctor of Sciences" and for the occupation of the academic position "Associate Professor";
4. Have presented other original scientific works, publications, inventions and other scientific and applied scientific works which are evaluated in aggregate;
5. Meet the national minimum requirements;
6. Not to have plagiarism proven by statutory order in scientific works.

Dr. Ivan Radoslavov Georgiev receives educational and scientific degree "Doctor" (diploma No PY-HC-2015-53 issued it 25.11.2015 from Rouse University) on the basis of a defended dissertation.

For Group B requirements, Ivan Georgiev submitted 15 publications, 10 of them with an impact rank and 2 in the global indexing and referral system, without an impact factor or impact rank, the total number points is 144 for required 100.

For Group G indicators, a total of 15 publications are presented, 10 with Impact Rank, 2 in the World Indexing and Referencing System, without Impact Factor or Impact Rank, and 3 book chapters, 2 in the international publisher Springer and one in Bulgarian language. The total number of points is 269 for required 220.

Dr. Ivan Georgiev submitted 41 citations by other authors, visible in WoS / SCOPUS. The total number of points is 246 with a required 70 under indicator D. He has other citations in dissertations and articles published in conference volumes, which are not included in the concurs materials.

Dr. Ivan Georgiev participated in 4 projects with national funding and one with international. The total number of points is 80 with the required 20 under indicator E.

Ivan Georgiev fulfills and, by some indicators, significantly exceeds the national requirements, as well as the specific requirements of BAS and IMI for the academic position of "Associate Professor".

Dr. Ivan Georgiev's publications are in the field of modeling various processes and their optimization. The main contributions in his research activity can be systematized as follows:

- A modified time series and multivariate time series forecasting approach based on numerical algorithms for solving ordinary differential equations and systems of ordinary differential equations has been developed;
- Various temperature surfaces in a room are modeled. The model is applied for better energy efficiency;
- An approach for assessing the location of apiaries in flat-hilly areas is presented. The model makes it possible to optimize the placement of apiaries;
- Various ways of forecasting, optimizing and diversifying heterogeneous financial portfolios are proposed;

- A multi-criteria transport model with various indicators has been developed. Different types of inflows of transport service requests have been modeled.

I do not know the candidate and have no personal impressions of his work.

The materials presented by the candidate are complete and detailed. They contain the necessary information required by law. The contributions are presented concisely and summarized, with emphasis on the significant author's contribution.

According to the presented documents, the candidate Ivan Georgiev fulfils all the requirements of the law and the Regulations to it and the Regulations for the specific requirements for acquiring academic degrees and occupying academic positions at BAS and IMI-BAS. I give a positive conclusion for the selection of Ivan Georgiev in the competition for the academic position of "Associate Professor" in the professional field 4.6 "Informatics and Computer Science", scientific specialty "Informatics".

I propose that the Scientific Jury unanimously vote on a proposal to the Scientific Council of the Institute of Mathematics and Informatics at the Bulgarian Academy of Sciences to select Dr. Ivan Georgiev for the academic position "Associate Professor" in the professional field 4.6 "Informatics and Computer Science", scientific specialty "Informatics".

09.05.2023