

OPINION

Competition for academic position "Associate professor" in the area "5. Technical sciences", professional field "5.2. Electronics, Electrical Engineering and Automation", for the needs "Information processes and systems for the use of solutions (IPDSS)" department at ICT-BAS, announced in the State Gazette. No. 81 of 11.10.2022 with only candidate Iliyan Ivanov Petrov, Ph.D., senior assistant

Member of the scientific jury: Prof. Dr. Tasho Angelov Tashev

1. General characteristics of candidate's scientific research and presented scientific materials

Only one candidate participates in the competition - senior assistant Iliyan Ivanov Petrov (PhD) who currently holds the position of senior assistant in department IPDSS at IICT BAS, whose research activity is in the field of the competition. The submitted documents meet the requirements and fully cover both the minimum national requirements and those of IICT-BAS as follows:

Indicator group A (50 out of 50 points). Certificate No. 08-00-10/04.07.2019 for the scientific and educational degree "PhD" on the topic "Evolution of world and European energy market structures and prospects for the development of gas transport networks in South-Eastern Europe with the participation of Bulgaria and Russia".

Indicator group B (minimal requirement - 10 articles and 100 points), The candidate submitted 11 full-text independent papers all published in publications, referenced and indexed in world-famous databases (visible in SCOPUS) which carry 660 points and significantly exceed the requirements for this indicator.

Indicator group D (minimal requirements for IICT-BAS - 220 points). The candidate submitted 9 full-text papers, respectively 6 in category D7 (visible in SCOPUS) and 3 for category G8, which carry a total of 300 points.

All publications under groups B and D were realized after the defense of the dissertation in 2015 (the year of acquiring the Ph.D. degree) and have a digital identification number ISBN and were published in scientific journals and proceedings of international conferences in Bulgaria, India, Russia, Egypt, Iran, Poland, North Macedonia.

Indicator group E (specific minimum requirement for IICT - 20 points). For indicator E18 the candidate declared his participations in 2 projects that carry a total of 20 points. The projects are financed by the National Research Institute of Bulgaria.

2. Evaluation of the candidate's scientific and applied activity and contributions to the materials submitted for review

The candidate's scientific research and achieved scientific and -applied results are in the field of Information Theory, the concept of entropy and their application in various fields of science, technology and economics. Original concepts and methods for evaluating hierarchy are proposed, such as the Hierarchy Index with Logistic Model and Sigmoid Basis Function Graph and Hierarchy Index with Power Model and Simplified Graph are formulated, which contribute to improving of the analysis and categorization of information systems and economic market structures.

Different options and combined approaches are proposed, including subjective expert methods and objective quantitative and qualitative assessment methods in multi-criteria analysis and decision-making

in the field of various components of information and energy systems, international markets and pandemic processes.

In the indicated areas, the candidate demonstrates a relevant theoretical knowledge and a high professional level in the analysis of specific problems with wide practical application.

Critical remark. I recommend the candidate to work more actively to solve specific problems and current tasks in the field of risk analysis and information security in the field of finance, energy and other fields with colleagues from Bulgaria and other countries.

3. Conclusion

The documents and materials presented by senior assistant professor Iliyan Ivanov Petrov (PhD), meet the requirements of the Law on the Development of Academic Staff in the Republic of Bulgaria, the Regulations for the Application of the LDAS in RB, the Regulations on the Terms and Conditions for the Acquisition of Scientific Degrees and Positions at the Bulgarian Academy of Sciences and the Regulations on the Specific Conditions for Acquiring Scientific Degrees and for Occupying Academic Positions at IICT-BAS.

The achieved results by senior assistant Iliyan Ivanov Petrov (PhD) correspond, and in some indicators - exceed the national and the specific additional requirements of IICT-BAS for occupying the academic position "Associate Professor".

Based on the presented documents and scientific works and the analysis of their significance and the contributions contained in them, I express a general positive conclusion for the selection of senior assistant Dr. Iliyan Ivanov Petrov to the academic position of "Associate Professor" in this competition I recommend to the Scientific Jury to propose to the Scientific Council of IICT-BAS to select the candidate. Iliyan Ivanov Petrov (PhD) for the academic position "Assistant Professor" at IICT-BAN, for the needs of the "Information Processes and Decision-Support Systems department, in professional field 5.2 "Electrical Engineering, Electronics and Automation", specialty "Application of the Principles and Methods of Cybernetics in various fields of Science".

22.01.2023
Sofia

Opinion:

НА ОСНОВАНИЕ

ЗЗЛД