OPINION

regarding a competition for the academic position of *Associate Professor* in Higher Education Area 5. Technical Sciences, Professional Field 5.3. Communication and Computer Engineering, Scientific Specialty "Modern Information Technologies," announced in the State Gazette, Issue 89/24.10.2025, at Burgas State University "Prof. Dr. Asen Zlatarov"

Member of the Scientific Jury: Prof. Sotir Sotirov

Brief Biographical Information

Since January 2022, chief Assistant Professor Dr. Stanislav Konstantinov Popov has held the academic position of Chief Assistant Professor at the Department of Computer Systems and Technologies at Burgas State University "Prof. Dr. Asen Zlatarov." His teaching activities include courses in Software Design, 2D and 3D Animation, Application Development with Flutter/Dart, Operating Systems, and Knowledge Processing.

In the period 2020–2022, he served as Assistant Professor at the same department, teaching Operating Systems and Modeling and Design of Software Systems.

Between 2017 and 2020, he obtained the PhD degree in Computer Systems and Technologies, with research interests in Data Mining, Generalized Nets, and Artificial Intelligence. He holds a Master's degree in Computer Systems and Technologies with the qualification of Engineer (2013–2015).

Research Activity of the Candidate

His research activity focuses on intelligent systems, Generalized Nets, machine learning, fuzzy logic, and data analysis, with applications in environmental, energy, and healthcare processes, as well as in educational technologies. His research is consistently developed within Professional Field 5.3, combining theoretical modeling with practical applicability.

According to the submitted author's report, the candidate participates in the competition with 25 publications, including papers in international journals indexed in Scopus and Web of Science, as well as a university textbook.

The scientific output is thematically structured and concentrated in several clearly defined directions:

- Development and analysis of Generalized Net models of machine learning algorithms (BIRCH, EM, Naïve Bayes, etc.), with contributions related to formalization, traceability, and evaluation of algorithmic processes;
- Integration of Intuitionistic Fuzzy Sets and InterCriteria Analysis in the evaluation of complex systems and handling uncertainty;
- Application of statistical methods, multiple regression, and neural networks in the analysis of environmental, healthcare, and social data;

- Modeling and forecasting of solar radiation and energy efficiency using hybrid methods;
- Application of virtual reality and modern information technologies in the educational process.

A significant number of citations in international scientific publications are presented, demonstrating scientific visibility and sustained interest in the research results. According to Scopus, the candidate has 23 documents, 57 citations, and an h-index of 4; according to Google Scholar, he has 24 documents, 102 citations, and an h-index of 6.

According to the report on minimum requirements, the candidate has achieved 910.27 points with a minimum required threshold of 650 points, exceeding the requirements in all indicator groups – publications, citations, project activity, and teaching and methodological work.

Project Activity

The candidate has an active project portfolio at both national and international levels. He has participated in the National Research Program "Information and Communication Technologies for a Unified Digital Market," as well as in several university research projects in the field of artificial intelligence and real-process analysis.

He is the project leader of "Application of Intelligent Methods for Modeling and Analysis of Real Processes," which demonstrates scientific independence and organizational capacity.

Additionally, he has participated in European projects under the Horizon 2020 and Horizon Europe programs (Marie Skłodowska-Curie Actions), demonstrating integration into international research networks and compliance with European research standards.

Evaluation of Teaching Activity

According to the submitted teaching workload report, the candidate has maintained consistent and high teaching engagement in recent years, with an annual workload exceeding 600 hours over the past three academic years.

He teaches in the Bachelor, Professional Bachelor, and Master degree programs in courses such as Operating Systems, Software Design, Web Services, Computer Graphics, Multimedia, and Knowledge Processing.

His teaching activity is directly connected to his research work, ensuring the transfer of modern methods and technologies into the educational process and contributing to the modernization of teaching within the professional field.

Main Scientific and Applied Contributions

I accept the scientific and applied contributions formulated by the candidate.

They may be summarized as follows:

- Development of Generalized Net models and intelligent algorithms for data analysis;
- Integration of fuzzy evaluations and machine learning in modeling real processes;
- Application of statistical and neural methods in the analysis of environmental and energy indicators;
- Application of virtual reality and modern information technologies in education.

Critical Remarks and Recommendations

The candidate's scientific output is interdisciplinary and thematically diverse, which is positive, but in the future it would benefit from clearer profiling around a leading research core.

I would recommend strengthening publication activity in higher-quartile journals and expanding international scientific partnerships.

These recommendations do not diminish the overall positive evaluation of his scientific and teaching activity.

Conclusion

The presented indicators of research, project, and teaching activity of Chief Assistant Professor Dr. Stanislav Konstantinov Popov meet and significantly exceed the minimum requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria, its implementing regulations, and the internal regulations of Burgas State University "Prof. Dr. Asen Zlatarov."

On this basis, and following a comprehensive evaluation of his scientific, project, and teaching activity, I propose that **Chief Assistant Professor Dr. Stanislav Konstantinov Popov be elected to the academic position of *Associate Professor* in Higher Education Area 5. Technical Sciences, Professional Field 5.3. Communication and Computer Engineering, Scientific Specialty "Modern Information Technologies."**

Prepared by:
Prof. S. Sotirov