REVIEW

By: Prof. Stanimir Ivanov Kabaivanov, PhD, Plovdiv University "Paisii Hilendarski", professional field 3.8 "Economics"

of scientific works of Assoc. Prof PhD Galina Mircheva Ilieva, part of an application for the academic position "professor" in 3. Social, economic and legal sciences, professional field 3.8. Economy (Economics and Management – Information systems and technology), published in SG, issue 40 / 14.05.2021

The procedure of occupying the academic position "Professor" at Plovdiv University, Faculty of Economics and Social Sciences, Department of Management and Quantitative Methods in Economics, have been published in the State gazette, No 40/14.05.2021, as well as on the university web page. Sole applicant for the position is Assoc. Prof. Galina Mircheva Ilieva, Faculty of Economics and Social Sciences, Plovdiv University "Paisii Hilendarski".

Grounds for the review: Order of the Rector of Plovidy University "Paisii Hilendarski" P 33-3126, or 12.07.2021.

1. Brief introduction of the candidate

Assoc. Prof. Dr. Ilieva has submitted 24 scientific papers, as follows: 1 monograph study; 16 scientific publications in journals; 6 publications in proceedings of international scientific conferences and 1 textbook. Nine of the listed scientific works are indexed in Web Of Science / SCOPUS. None of the submitted papers repeat texts used for the defense of PhD thesis, as well as applications for "Chief Assistant" and "Associate Professor". The total number of publications of Assoc. Prof. Dr. Ilieva, including those used for previous academic position openings is 84.

The applicant has submitted 22 citations of publications that are indexed in Web of Science / SCOPUS. Seven of them are in Q1 journals, while ten others are in Q2 journals.

Assoc. Prof. Dr. Ilieva have developed and teaching courses in *Information Systems* and *Technologies, E-Commerce, Internet Marketing, E-Government, Business Analysis with* R, *Internet Technologies in Tourism*. Three of these courses have versions in English. In the last four years, the candidate has given lectures and exercises in six different majors, with her teaching employment significantly exceeding the required minimum.

The applicant has participated in 6 scientific projects – a leading team member of a national one; part of the scientific team of four other national projects and one international. Assoc. Prof. Dr. Ilieva participated in two scientific committees in 2020/21. She is a member of the organizing committees of 24 different scientific forums. Assoc. Prof. Dr. Ilieva is the author of over 200 scientific reviews for 27 different scientific journals (10 of which are indexed in Web Of Science / SCOPUS).

In 2016, the applicant was a lecturer at the University of Macedonia, Thessaloniki, Greece.

All of the applicant's teaching and research activities comply in full with the minimal national requirements in accordance to Art. 2b, para. 2, 3 and 5; Art. 29, para. 1 and 2 of legislation. Assoc. Prof. Dr. Ilieva fulfills the additional requirements of the Faculty and the University of Plovdiv "Paisii Hilendarski" applicable for academic positions in 3. Social, economic and legal sciences, 3.8. Economics (Economics and Management - Information Systems and Technologies). I am not aware of any existing cases of plagiarism or incorrect citation in the submitted scientific papers.

2. Overview of candidate research papers

Assoc. Prof. Ilieva, PhD research is focused on application of information systems and technologies in solving economic and management problems.

Научноизследователската работа на доц. д-р Илиева е ориентирана към прилагането на информационните системи и технологии за решаване на проблеми в областта на икономиката и управлението. It is possible to put her research papers into several categories, where I shall comment explicitly only the most relevant and interesting parts of them:

2.1. ICT teaching and training (N_2 3, 5, 7, 11, 19, 23, 24).

The scientific results of Dr. Ilieva have significant practical impact, as they aim at improving the quality of teaching in ITC and mathematics. Special attention should be given to her studies in different ways to apply GIS and BI software applications in contemporary studies of students in Economics and Management.

Research paper N_2 19 also deserves to be mentioned as methods discussed in it can help in early detection of studying problems, thus making it possible to correct them proactively.

- 2.2. Application of intelligent algorithms and fuzzy sets in solving economic and managerial problems (N_2 4, 6, 7, 9, 10, 12, 13, 15, 16, 17).
- Dr. Ilieva proposes innovative and original approaches for analysis of marketing information, supplemented by spatial localization. All the additional capabilities that GIS software packages provide are important for producing more accurate and complete analysis of market and product research information. Studies discussing new methods to support the decision-making process (No. 10, 12) are further developed and extended in the submitted monograph (1). This highlights the purposefulness and perseverance in the scientific interests of Assoc. Prof. Ilieva, PhD.
- 2.3. Methods and algorithms for analysis of large data sets and analytical tools to support decision making (N_2 1, 8, 10, 12, 14, 18, 21).

The monograph study "Cloud Technologies: Multicriteria Choice" suggests and implements an original methodology for selecting the most appropriate cloud services. The use of multicriteria evaluation, which is successfully supplemented by fuzzy logic and fuzzy assessments, makes it possible to apply the results in a large number of real-world scenarios. The problems related to the selection of IT services and analytical systems are important for companies of different scale and type of activity. As the candidate demonstrates with research papes N 10 and 12, the ideas contained in her monograph study can support decisions for selection of products optimizing business processes in organizations.

3. Remarks and recommendations

Research contributions of papers presented by Assoc. Prof. Galina Ilieva, PhD can be put into the following categories:

- innovative applications of ICT in the training of specialists in the field of economic and social sciences (research papers 3, 5, 7, 11, 19, 23, 24);
- intelligent algorithms and methods for solving economic and managerial problems (research papers 4, 6, 7, 9, 10, 12, 13, 15, 16, 17);

- methods and algorithms for analysis of large data sets and support of the decision-making process (research papers 1, 8, 10, 12, 14, 18, 21);

With regard to the future work of Assoc. Prof. Dr. Ilieva, I would recommend to apply a wider range of open source software packages when introducing students to ERP and BI tools.

3. Conclusion

The publications, project participation and the long-term successful teaching activity of Assoc. Prof. Ilieva testify to her in-depth knowledge of challenges related to the application of ICT in solving important economic and managerial problems. All of the citations in high-quality scientific journals are proof of the high esteem that the candidate's research has received.

The scientific results of Assoc. Prof. Ilieva are used in practice, while also being a source of new ideas and topics that support teaching in subjects related to the application of information systems and technologies in economics and management.

All these arguments give me grounds to propose to the esteemed scientific jury Assoc. Prof. Dr. Galina Mircheva Ilieva to take the academic position "professor" in 3. Social, economic and legal sciences, professional field 3.8. Economics (Economics and Management - Information Systems and Technologies).

01.09.2021 Plovdiv Prof. Stanimir Kabaivanov, PhD