

OPINION

by Associated Professor Hristina Nikolova Kulina, PhD, Plovdiv University "Paisii Hilendarski",

on a competition for the academic position "Associate Professor"
at Plovdiv University "Paisii Hilendarski"

in area of higher education 4. Natural science, Mathematics and Informatics,
professional field 4.5. Mathematics (Probability theory and mathematical statistics)

1. General Presentation of the Procedure and the Candidate

By order P33-636/19.02.2021 by the Rector of Plovdiv University "Paisii Hilendarski" (PU), I have been assigned as a member of the scientific jury for the competition for occupation of the academic position "Associate Professor" at PU for higher education field 4. Natural science, mathematics, informatics, professional field 4.5. Mathematics (Probability theory and mathematical statistics), announced as per the requirements of the Department of Mathematical Analysis at the Faculty of Mathematics and Informatics (FMI).

In the competition for "Associate Professor", announced in State Gazette, issue 99 of 20.11.2020 and the web page of Plovdiv University "Paisii Hilendarski", the **only** candidate is **Head Assistant Petar Ivanov Kopanov, PhD** from the Department of Mathematical Analysis of FMI at PU "Paisii Hilendarski".

As a member of the scientific jury I have received all necessary documents, submitted together with the application of Head Assistant Petar Ivanov Kopanov, PhD to the Rector of PU "Paisii Hilendarski" for admission to the competition.

For the competition, 18 (out of all 21) publications in journals and conference papers are selected. The selection of scientific papers for participation and review under this procedure is adequate and does not include papers by the candidate, used in previous procedures. A list of 16 noted citations is also included, none of which have been used in previous procedures.

According to the documents submitted for the competition, Head Assistant Petar Ivanov Kopanov, PhD fully complies with indicators A, B, G, D of the minimum national requirements as per the Rules for the application of Law on Development of the Academic Staff in the Republic of Bulgaria for occupying the academic position of "Associate Professor".

With regard to the additional requirements of FMI for the academic position of "Associate Professor", the candidate in this competition submitted 18 publications (minimum requirement of 8 publications); 18 publications in journals (minimum requirement of 5 publications in journals); 6 publications in journals with impact factor (minimum requirement of 3 publications in journals with impact factor); 4 hardcopy teaching aids (minimum requirement of 1 textbook or teaching aid); 16 citations (minimum requirement – proof of 5 citations), which ubiquitously demonstrates the fulfillment of the additional faculty requirements for the academic position of "Associate Professor" under field 4.5. Mathematics.

The candidate Petar Ivanov Kopanov was born on 5 10. 1962. In 1980 he graduated from the High-school of Mathematics "Konstantin Velichkov" in the city of Pazardzhik. In 1986, he finished his five-year course of study in Mathematics at the Faculty of Mathematics and Informatics of Sofia University "St. Kliment Ohridski" and acquired the qualification of "mathematician" specializing in "operations research", recognized as equivalent to a Master's degree. In 1996, he acquired the academic and scientific degree of "Candidate of

Mathematical Sciences” in the scientific field of “Probability Theory and Mathematical Statistics”. Since 1989, he has been as follows: Assistant, Senior Assistant and currently Head Assistant at the Department of Mathematical Analysis of FMI at PU “Paisii Hilendarski”.

2. General Characteristics of the Activity of the Candidate

2.1. Assessment of Educational and Pedagogical Activity

Petar Kopanov has over 30 years of pedagogical experience. As Head Assistant, he has lead seminars and laboratory practice for students in various specialties and in recent years, lectures on: Probability Theory and Mathematical Statistics, Applied Statistics, Modern Statistical Decision-making Methods, Statistical Software, Mathematical Optimization, etc. He has prepared and taught the following elective courses for Bachelor degree students at FMI: Non-standard Problems to Prepare for Mathematical Olympiads, Preparation of Mathematics and Computer Mathematics Competitions, and for Master's degree students: Non-linear and Stochastic Optimization, Types of Relationships and their Statistical Analysis, Stochastic Models in Operation Studies, etc.

The candidate – Head Assistant Petar Ivanov Kopanov, PhD – participates actively in extra-curricular activities for students as the head of the representative teams of PU in student Mathematics Olympiads since 2012. He has been the scientific supervisor of 35 post-graduate students and has sat on State Examination Boards.

As part of this procedure, 4 printed teaching aids are presented – three in co-authorship and one as the sole author, intended for use by students at the FMI of PU. The first three are collections of probability and statistics problems, to a large extent used over the last 20 years in practical lectures, seminars, ongoing testing, exams and as homework for students in the various specialties at FMI. The self-authored “Guide on working with Wolfram Mathematica” is a collection of examples of problems solved using software in various mathematical fields.

The presented “Scientific Research Papers” show that Head Assistant Petar Ivanov Kopanov, PhD has participated in 1 local and 1 international project; in 1 scientific research project ATACD (team member); presented reports at 7 international and national forums and is a member of the Union of Bulgarian Mathematicians.

2.2. Scientific and Applied Scientific Contribution of the Candidate

According to the reference for the candidate, he has submitted 18 publications for the competition, as follows: 6 publications in journals with IF (total IF = 4, 768); 3 publications in journals with SJR; 8 publications in journals; 1 publication in conference papers; 2 self-published papers - a total of 10 of these are indexed in Web of Science and/or SCOPUS.

A total of 16 citations are noted, 5 of which in journals with IF, 5 in journals with SJR, 9 are indexed in SCOPUS, and 1 in Zentralblatt Math.

I accept the author's reference for the candidate Head Assistant Petar Ivanov Kopanov, PhD provided in “Abstracts of the submitted materials and self-assessment of scientific contributions” summarized in six topical aspects, where authors’ participation in collaborative publications is assumed to be on an equal basis. I have not found any plagiarism in the scientific papers.

3. Critical Remarks and Recommendations

In the presented teaching aids on “Probabilities and statistics” 2010, 2012, and 2018, some of the problems overlap and should be considered as reworked editions of the first one from 2010. The 2018 edition is more focused, having a selection of problems for

Informatics students, it has a better layout and cites literature sources. In the “Guide on working with Wolfram Mathematica” the solutions to the problems are presented by directly specifying an input code, followed by the software output, which makes the guide more of a collection. Some operators have all possible options printed, which I find unnecessary.

I would recommend to the candidate to publish more actively his own papers in referenced international journals.

CONCLUSION

The documents and materials presented by Head Assistant Petar Ivanov Kopanov, PhD fully comply with all requirements of the Law on Development of the Academic Staff in the Republic of Bulgaria (ZRASRB), the Rules for the implementation of the Law on Development of the Academic Staff in the Republic of Bulgaria, the Rules for Development of Academic Staff of PU “Paisii Hilendarski”, as well as the additional requirements of FMI for the academic position “Associate Professor”.

The candidate has presented a sufficient number of scientific works, which do not repeat materials, used in previous procedures. The candidate fulfills to a sufficient degree the requirements for level of teaching and educational work within the scope of the competition.

After reviewing the materials presented under the competition and the authenticity of the presented scientific data, I can justifiably provide a **positive assessment** and recommend to the scientific jury to draft a report for the Faculty Scientific Council of the Faculty of Mathematics and Informatics suggesting that Head Assistant Petar Ivanov Kopanov, PhD should be selected for the academic position of “Associate Professor” at PU “P. Hilendarski” in higher education field 4. Natural science, mathematics, informatics; professional field 4.5. Mathematics (Probability theory and mathematical statistics).

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This opinion is prepared by: Assoc. Prof. Hristina Kulina, PhD