

O P I N I O N

by **prof. Nikolay Ivanov Yankov, DSc**

on the competition for acquiring the academic position „**professor**”
in professional field: 4. Natural sciences, mathematics and informatics,
professional area: **4.5. Mathematics** (Theory of probability and mathematical statistics) published in State Gazette No 63 from 06.08.2022
for Faculty of Mathematics and Informatics, Konstantin Preslavski University of Shumen (SHU), department „Economics and mathematical modeling”,
with only candidate **assoc. prof. Dr. Pavlina Kalcheva Jordanova**

1. General presentation of the received materials in accordance to art. 60–61(1) of RALDASRB

By order RD-16-201/03.10.2022 from the Shumen University Konstantin Preslavski’s Rector, I’m appointed as a member of the scientific jury and at its first meeting on 11.10.2022 I was voted as its Chair.

In accordance to art. 61, para. 1 of RALDASRB (Rules on the application of the Law for the development of the academic staff in the Republic of Bulgaria), the assessment of the applicant for the academic position ”professor” is done by art. 61 and the results from the reference in accordance to art. 60, para. 3 from RALDASRB. In connection with the implementation of art. 61, on the basis of the documents submitted, it was established:

- a copy of diploma No 30630 issued on 27.06.2006 for the educational and scientific doctoral degree „PhD” (satisfying art. 60, para. 1, item 1);
- a copy of diploma from 11.02.2014 for the academic position of „associate professor”, moreover a register entry in the Bulgarian registry of academic staff in the National centre for information and documentation (NACID) shows that the candidate has been hired as an „associate professor” with Rector’s order RD-12-047/01.03.2014 thus has at least two academic years of experience in an university (satisfying art. 60, para. 1, item 2);
- a monograph awarding 100 pts. when the minimum is 100 pts.;
- a reference list for meeting the minimal national requirement in accordance art. 2b, para. 2 and 3 of LDASRB as well as a reference for the original scientific contributions that are backed by evidence (satisfying art. 60, para. 3);
- a reference list for the additional indicators applicable to the respective area (satisfying art. 61, para. 3);
- a declaration of authorship on the scientific works for this competition (satisfying art. 60, para. 3, item 6).

2. General characteristics of the applicant's scientific activity and contributions

For participation in this competition assoc. prof. Pavlina Jordanova has listed a total of 23 published works not used for the doctoral thesis: a monograph titled „Probabilities for p -outside values and heavy tails”; a textbook with one coauthor (50 % equaling 134 pages); 1 student's manual; 20 scientific papers and 1 editorial paper. All articles presented have been referenced and indexed in world-renowned databases or databases of scientific information. Overall 13 papers have impact-factor of them: 3 in quartile Q1 (papers 6, 16, 19), 1 in Q2 (paper 3), 8 in Q3 (papers 2, 5, 12, 13, 14, 15, 20, 21), 1 in Q4 (paper 17). The total IF is 19.65, and the average IF is 1.51 which is a very high figure for the field of mathematics. Of the rest 8 papers 7 have impact-rank (SJR) with a total rank 1.545. A good impression is made by the fact that 9 of the articles are in journals entered the WOS/Scopus databases in the category „statistics and probabilities”, which shows the exact correspondence of the candidate's scientific activity with the scientific specialty of the competition. The remaining publications are in the mathematics and multidisciplinary categories.

The candidate's scientific works, which are submitted for this competition, can be grouped as follows:

- Study of probabilities for outside values in different distributions (monograph, 7, 8, 11);
- Construction of statistics for extremes estimation (1, 3, 4, 9, 19);
- Improvement of existing methods for time series analysis (2, 12, 14, 17);
- Modeling of random processes in insurance (10, 13, 16, 18, 20);
- Applications of the constructed statistical estimates and methods (5, 6, 15).

I accept all formulated original scientific and applied-scientific contributions of the applicant indicated in the attached form. I am not aware of plagiarism in the works presented.

3. Fulfillment of minimum national requirements

I accept the candidate's list of points to the minimal national requirements:

- Group B: 1 monograph for 100 pts. (the required minimum is 100 pts.);
- Group G: 879 points from 21 scientific articles (the required minimum is 200 pts.);
- Group D: 45 citations in WOS and Scopus totaling 364 pts. (the required minimum is 100 pts.);
- Group E: participation in 3 national scientific or educational projects, 1 participation in an international scientific or educational project, 1 participation as principal investigator of an international scientific or educational project and attracted funds

for projects managed by the candidate (for 1 project) – a total of 133 pts (100 pts. being the minimum).

4. Evaluation of the candidate's personal contribution, other activities

Of the publications submitted for this competition: 3 are candidate's sole work, 8 have 2 authors, 4 have 3 authors and the rest have 4 or more authors. From the attached protocols of contribution, it can be seen that the co-worked publications are equal partitioned with the other authors. Except for the textbooks, all other works are in English.

Among the other activities, a good impression leaves the number of peer reviews performed by the candidate – a reference in „Web of Science” (WOS) shows 87 confirmed reviews, of which the most: 23 are in „Journal of Applied Statistics” and 15 in „Mathematics”. This shows the recognition of assoc. prof. Yordanova among specialists in the field of probabilities and statistics. Also, a check in the reference databases Mathematical Reviews and ZbMath (ZentralBlatt) shows a total of 30 reviews in both databases authored by the candidate. The applicant's h-index is 6 in WOS and 3 in Scopus, only the latter allowing self-citations to be removed.

A nice impression also gives the active dissemination of the candidate's scientific research results: 42 conference talks are indicated, of which 12 were held abroad. Scientific and educational project activity is also high: assoc. prof. P. Jordanova was principal investigator in one international and 6 projects at SHU, as well as participant in 1 international, 3 national and 10 projects at SHU.

5. Critical notes and recommendations


I recommend to assoc. prof. Jordanova to increase her work with doctoral students and in the future to achieve a successful doctoral thesis defence of one of them. It would also be good to focus her efforts on more participation in prestigious conferences abroad, thereby increasing the visibility of her research, increasing the citations count.

6. Conclusion

All mentioned above, and the fact that the candidate satisfies all requirements of LDASRB, RALDASRB and Konstantin Preslavski University's rules, forms the basis for me to propose assoc. prof. Pavlina Kalcheva Jordanova to be awarded the academic position „**professor**” in area: **4.5. Mathematics**, scientific speciality „Theory of probability and mathematical statistics”.

Shumen, 28.10.2022

Scientific jury member:


/prof. Nikolay Yankov, DSc/