## **OPINION**

by Prof. Pavlina Kalcheva Jordanova (Yordanova), professor in the field of higher education: 4. Natural sciences, mathematics and informatics,

area of science: 4.5. Mathematics at Department of "Economics and Mathematical Modeling" at the Faculty of Mathematics and Computer Science of the Konstantin Preslavsky University of Shumen,

about competition for the academic position of "professor", in the field of higher education:
4. Natural Sciences, Mathematics and Informatics,

area of science: 4.5. Mathematics, announced in SG no. 35/18.04.2023 for the needs of the New Bulgarian University, Master's Faculty, Department of Informatics

The opinion was prepared on the basis of 3-PK-222/25.05.2023 of the Rector of the New Bulgarian University (NBU). It complies with the requirements of: the Law on the Development of the Academic Staff in the Republic of Bulgaria (LDASRB), the Regulations for the Implementation of the LDASRB, the Regulations for the Organization and Activities of the NBU, the Ordinance on the Development of the Academic Staff of the NBU and the template for the structure of a competition opinion for occupying the academic position of "professor" at the NBU. Two candidates have submitted their documents for this position:

- 1. Associate Professor Dimitar Vladislavov Atanasov and
- 2. Associate Professor Danail Stefanov Brezov.
- I. Assessment of compliance with the minimum national requirements and the requirements of the New Bulgarian University: In this point I will describe the quantitative characteristics of the materials submitted by the candidates for the competition. In the parentheses, after the ">" sign, the minimum number of points required by the Ordinance on the Development of the Academic Staff of the NBU is written. The considered works do not repeat those used by the candidates for the acquisition of the educational and scientific degree "doctor" or the academic position "associate professor".

**Group of indicators A:** Both candidates have submitted a diploma for the educational and scientific degree "doctor", for this they receive 50 points each ( $\geq 50$ ).

**Group of indicators B:** The two candidates did not submit materials for this vey receive  $\mathbf{0}$  points each  $(\geq 0)$ .

Group of indicators II from the requirements of the NBU: The candidates have not provided evidence of this, I accept that they have 70 points each on this indicator.

In the following, I will separate the description of the candidates' achievements due to their differences.

## · Assoc. Dr. Dimitar Atanasov

**Group of indicators C, indicator 4:** Associate Professor Dimitar Atanasov, presented the scientific publications described in the following table. They are referenced and indexed in world-renowned databases of scientific information.

Databases	Quartile in year of	IF in year of	Points realized by
	publication (yr) and	publication (without	candidate
	category	self-citations)	
Web of	Q1 (2021)	3.088 (2.818)	25*3 = 75  pts.

Science (WoS) c IF	Q2 (2020)	2.821 (2.500)	20*3 = 60  pts.
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According to the data from the previous table the candidate has 135 points ( $\geq 100$ ).

**Group of indicators D, indicator 7:** Associate Professor Dimitar Atanasov presented the scientific publications described in the following table. They are referenced and indexed in world-famous databases with scientific information and do not repeat the works described in the previous table and in the previous procedures. Two of the papers presented are in a journal that is referenced in WoS, but I can't find either IF or SJR in the year of publication, so these papers are placed in the row "Other publications" and JCI is presented for them.

Databases	Quartile in year of	IF, or SJR, or JCI in year of	Points,
	publication (yr) and	publication (without self-	realized by the
	category	citations)	candidate
Web of	Q4 (2020)	IF 0.378 (0.283)	12*3 = 36 pts.
Science c IF	Q4 (2020)	IF 0.378 (0.283)	12*3 = 36  pts.
	Q3 (2021)	IF 1.416 (1.283)	15*3 = 45  pts.
	Q4 (2023)	IF 0.2 (0.1)	12*3 = 36  pts.
Scopus c	(2021)	SJR 0,161	10*3 = 30  pts.
SJR без IF	(2021)	SJR 0,401	10*3 = 30  pts.
Other	Q2 (2020)	WoS JCI 0.91	6*3 = 18  pts.
publications	Q2 (2021)	WoS JCI 0.91	6*3 = 18  pts.

According to the data from the previous table, the candidate has 249 points ( $\geq 200$ ).

**Group of indicators D:** I find the following citations of Assoc. Prof. Dimitar Atanasov, which are in sources referenced and indexed in world-famous databases with scientific information.

Databases	Web of Science or Scopus	Other
Candidate	1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22,	None
List Citation	23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40,	
Number	41, 42, 43, 44, 45, 46, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59,	
	60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77	
Total number	74	0
Points <sup>1</sup>	74*2*4 = 592  T.	0

According to these data the candidate has 592 points ( $\geq 100$ ). Citations 9 and 11 indicated by the candidate are not counted because they are actually self-citations. I cannot find in Scopus the citations of article 47 from the candidate's list, therefore, it is excluded from the above table. Article 52 of the same list cites another candidate's article that meets the requirements and is included in the above table. I do not have Book 48, so this citation is taken on trust by the candidate's list.

**Group of indicators E:** Associate Prof. D. Atanasov has presented materials and contracts for carrying out scientific work with the Ministry of Education, UNICEF, with the National Center for Evaluation of Education in the Kingdom of Saudi Arabia, etc., which were concluded after his habilitation. Due to the ambiguity in the definition of the concept of "project" in the LDASRB and the rules for it, without commenting on the exact number of points of the candidate according to this indicator, I assume that the minimum requirements of the law are satisfied.

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<sup>&</sup>lt;sup>1</sup> realized by candidate

Group of indicators **K** from the NBU requirements: Associate Professor Dimitar Atanasov presented membership in two national scientific organizations, three software packages and information on three statistical tests, showing application of the results of his work in practice. He indicated active participation in the creation of the Bachelor's program "Information Technologies", as well as the development of courses and curricula in this and other programs. In my opinion, he has proven professional applied skills in the field of mathematics, which is why he has more than the required **70** points for this indicator.

Group of indicators 3 of the requirements of the NBU: Associate Professor D. Atanasov supervised four diploma theses and one student in writing an article and giving a scientific report, he developed author's materials for six courses, and supported the work of one PhD student, led more then two courses in English. Therefore, in my opinion, he has more than 70 pts.

## • Assoc. Dr. Danail Brezov

**Group of indicators C, indicator 4:** Associate Professor Danail Brezov, presented the scientific publications described in the following table that are referenced and indexed in world-renowned databases with scientific information.

Databases	Quartile in year of	IF in year of	Points realized by
	publication (yr) and	publication (without	candidate
	category	self-citations)	
Web of	[19] Q3 (2018)	0.936 (0.889)	15*3 = 45  pts.
Science c IF	[20] Q3 (2018)	1.066 (0.711)	15*3 = 45  pts.
Scopus c SJR без IF	[16] - (2014)	SJR 0.171	10*3 = 30  pts.
Other publications	[18] - (2018)	-	6*3 = 18  pts.

Papers [14], [15], [17] and [21] participated in the competition for "docent" of this candidate, as is evident from the opinions still available on the Internet, so they are excluded from the above table. According to this table the candidate has 138 points ( $\geq 100$ ) in this indicator.

**Group of indicators D, indicator 7:** Associate Professor Danail Brezov has presented the scientific publications described in the following table that are referenced and indexed in world-famous databases with scientific information and do not repeat those described in the previous table and in the previous procedures works.

Databases	Quartile in the year of	IF, or SJR in the year of	Points,
	publication (year) and	publication (without auto-	realized by the
	category	citations)	candidate
Web of	[22] Q3 (2020)	IF 1.072 (0.774)	15*3 = 45  pts.
Science c IF	[23] Q1 (2021)	IF 3.007 (2.719)	25*3 = 75  pts.
	[24] Q2 (2022)	IF 1.5 (1.3)	20*3 = 60 pts.
	[25] Q2 (2022)	IF 1.5 (1.3)	20*3 = 60 pts.
	[30] Q2 (2022)	IF 2.7 (2.9)	20*3 = 60  pts.
	[31] Q1 (2023)	IF 8.3 (8.2)	25*3 = 75  pts.
Others <sup>2</sup>	[33] - (2023)	-	15 pts.

<sup>&</sup>lt;sup>2</sup> Published book chapter or collective monograph

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Articles [26], [27], [28], [29] and [32] participated in this candidate's "associate professorship" contest, as can be seen from the opinions still available on the Internet, so they are excluded from the above table. According to these data the candidate has 390 points ( $\geq 200$ ).

**Group of indicators D:** I find the following citations of Assoc. Prof. Danail Brezov which are in sources referenced and indexed in world-famous databases with scientific information

	Web of Science or Scopus <sup>3</sup>	Others
Citation number in	[1 (2, 3, 5, 7)], [8 (2, 3, 4, 5, 7, 8, 9)], [11 (2)],	[1 (4, 6)], [2 (1)],
list of the candidate	[12 (1)], [17 (1, 2)], [18 (1, 2)], [22 (1, 2, 3)]	[4 (1)]
Number of citations	20	4
Points	20*2*4 = 160 pts.	4*1*4 = 16 pts.

I do not find the citations [1 (1)], [2 (3)], [7 (1, 2)] and [8 (1)] of the candidate's list in the articles, therefore, they are excluded from the above table. The citations [8 (4)] and [8 (6)] match, so [8 (6)] is not included in the above table. Papers [18 (1, 2)] from the same list cite other candidate's papers that meet the requirements and are included in the above table. I do not have the complete list of citations of Associate Professor Danail Brezov which participated in the competition for "associate professor", but it is striking that in one of the reviews for the "associate professor" procedure, it is written that he then participated with 15 citations, and in the documents accepted by me, 7 citations are indicated. In any case, however, it satisfies the minimum requirements of the law on this indicator. Without reducting points for possible duplicate citations, according to the data from the previous table, the candidate has 176 points ( $\geq 100$ ) for this indicator.

Group of indicators E: I do not find any documents that prove the participation of Assoc. Prof. Danail Brezov in national or international projects. From one of his reviews in the "docent" procedure it is clear that he has accumulated 110 points on this indicator in the last procedure. It is not clear to me from which textbooks and projects he accumulated these points at that time in order to comply with note 8 c) of the Regulations for the Implementation of the LDASRB. Therefore, I have no evidence that this criterion is satisfied by Assoc. Prof. D. Brezov, and I take this on trust without commenting on the exact number of the candidate's points according to this indicator.

Group of indicators **X** of the requirements of the NBU: Assoc. Prof. Danail Brezov presented two translations of scientific works, development of two curricula, he described participation as an organizer and lecturer in international summer schools and conferences. Therefore, in my opinion, he has proven professional applied skills in the field of mathematics and he has the required **70** points by this indicator.

Group of indicators 3 of the requirements of the NBU: Assoc. Prof. Danail Brezov consulted a doctoral student and he described that he had prepared students for participation in Olympiads. According to the attached reference, there are authored study materials for at least one course. Therefore, in my opinion, according to this indicator, he has 70 points.

## II. Research (creative) activity and results

My criterion here is journal quartile because, in my opinion, it is inappropriate to compare the IF of applied journals with the IF of purely mathematical journals. Only articles that did not repeat those involved in prior procedures were analyzed.

<sup>&</sup>lt;sup>3</sup> [cited article number (its citation number)]

- 1. In my opinion, the articles presented by the two candidates for habilitation theses, have almost the same scientific and applied value with a very small advantage of the quality of the articles of Assoc. Prof. Dimitar Atanasov.
- 2. In my opinion, the other articles presented by the two candidates for participation in the competition also have almost the same scientific and applied value with a very small advantage in favor of Assoc. Prof. Danail Brezov.
- 3. The citations, however, of Assoc. Prof. Dimitar Atanasov are many times more significant and this mainly makes me to decide that he is the better candidate for the announced position.
- 4. Assoc. Prof. Dimitar Atanasov has carried out many scientific activities, the results of which support education management government structures in Bulgaria and abroad, he has developed applied software in his scientific field. These again leads me to decide that he is the better candidate for the considered position.
- III. Learning and teaching activity: Both candidates have the necessary teaching experience. Assoc. Prof. Dimitar Atanasov, however, has a significantly richer one. This again leads me to decide that he is the better candidate for the considered position.
- IV. Administrative and public activity: The candidates are almost equal according to this indicator. Assoc. Prof. Danail Brezov did not provide evidence of such activity while Assoc. Prof. Dimitar Atanasov provided documents from UNICEF, MON and the National Center for Education Evaluation in the Kingdom of Saudi Arabia.
- V. Personal impressions of the candidate (if any): I have no personal impressions of Assoc. Prof. Danail Brezov. My observations of Assoc. Prof. Dimitar Atanasov are that he is a helpful and responsible colleague.
- VI. Opinions, recommendations and notes on the activity and achievements of the candidate: I would recommend both candidates to be more actively involved in the training of followers: scientists and researchers. I would recommend Assoc. Prof. Danail Brezov to be more careful and correct in preparing documentation for competitions. I would recommend Assoc. Prof. Dimitar Atanasov to be more active in his scientific work. These remarks in no way detract from the achievements of the candidates.

Conclusion: The materials submitted by the two candidates show that, particularly in places as I described above "in confidence", they satisfy the basic requirements of the LDASRB, the Regulations for its implementation and the relevant guidelines and regulations of the NBU. From the observations made on the work of the two candidates I arrange them in descending order in the following way:

- 1. Associate Professor Dimitar Vladislavov Atanasov
- 2. Associate Professor Danail Stefanov Brezov.

Based on my familiarity with the presented scientific works, their significance, the scientific, and applied contributions contained in them, I find it reasonable to recommend Associate Professor Dimitar Vladislavov Atanasov to occupy the academic position of "professor" in the field of higher education: 4. Natural sciences, mathematics and informatics; area of science: 4.5. Mathematics at NBU.

03 August 2023

Signature:

/Professor Pavlina Kalcheva Jordanova (Yordanova) /