

## OPINION

By Prof. Dr.Sci. Neyko Mateev Neykov NIMH - Member of the Scientific Jury  
in the competition for academic position "Associate Professor"  
within the area of 4. Natural sciences, mathematics and informatics,  
professional direction 4.4. Geophysical sciences, scientific specialty „Meteorology“

This opinion was prepared on the basis of the Order of the Director General of NIMH № ND-04-31 of 08.10.2021 and the decision of the meeting of the scientific jury of 15.10.2021. It is in accordance with the requirements of the Academic Staff Development Law in the Republic of Bulgaria (ZRASRB), the Regulations for its implementation (RAPRASRB) and the NIMH Regulations on ZRARB.

### I. Requirements for the applicant

under Art. 24 (1) and Art. 26 (1), (2) of ZRASRB, art. 53 (1) and Art. 54 (1) of PPZRASRB and Art. 53 (1) and Art. 54 (1) of the NIMH Regulations on ZRARB

Dr. Lilia Ivanova Bocheva graduated with a degree in physics and holds the qualification "Master of physics" in the specialization "Meteorology and geophysics" from the Faculty of Physics of Sofia University St "Kl. Ohridski". She had started her service at the NIMH-BAS as a meteorologist. During the period 01.10.2009-01.10.2014 she was a PhD student at NIMH-BAS under supervision of Assoc. Prof. Dr. P. Simonov. In 2014 she defended her PhD thesis on "Climatic variations and hazardous meteorological events assessment by convective storms over the territory of Bulgaria". During the period 07.2001-04.2019 she worked as a researcher 3<sup>rd</sup> degree and research assistant professor at the NIMH-BAS. During the period 05.2019-09.2020 she worked as a head of „Meteorological experimental data" department and since 10.2020 she has been the Director of the department of "Meteorology", NIMH.

For this competition, Dr L. Bocheva presents the following materials: 1) application for participation in the competition; 2) autobiography; 3) list of publications and copies of their full texts in technical media; 4) reference for contributions on the fulfillment of the minimum national requirements for occupation of the academic position under art. 2b, item 2 and item 3 of ZRASRB and under art. 2, item 4 of PPZRASRB of NIMH; 5) reference for the contributions; 6) reference to the citations; and 7) reference about projects participations.

In my opinion, there are no procedural violations or non-compliance with some of the formal requirements.

### I. Requirements for research and development activities

under Art. 24 (1), items 1, 3, 4 and 5 and Art. 26 (1) of ZRASRB, art. 53 (1), items 1, 3, 4 and 5 and Art. 54 of PPZRASRB, art. 53, items 1, 4, 5, 6 and 7 of NIMH Regulations on ZRASRB

Only scientific production is submitted for opinion which does not repeat submitted for the PhD degree.



**1. Scientific publications.** The list of scientific papers presented by Dr. L. Bocheva for this competition comprises 31 titles. The numbering of the papers is in separate order for each of the groups of indicators B, D and E according to Table 2. of the NIMH Regulations on ZRASRB.

The publications with numbers [1, 2, 3, 4, 5, 6, 7, 8, 9, 10] which belong to indicator B sub-indicator 4 have been published in peer-reviewed journals and in the proceedings of international conferences referenced and indexed in world-renowned scientific information databases. These publications form the "habilitation thesis" for participation in this competition. The total number of points on this indicator is 189.5.

The publications with numbers [1, 2, 3, 4] which belong to indicator G sub-indicator 7 have been published in peer-reviewed scientific issues indexed in world-renowned scientific information databases. The total number of points on this indicator is 83.3.

The publications with numbers [1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16] which belong to indicator G sub-indicator 8 have been published in non-referred peer-reviewed journals or edited conference proceedings. The total number of points on this indicator is 121.

**2. Citations of scientific publications:** The publications of Dr L. Bocheva are cited 24 times in scientific journals such as Advances in Meteorology, Atmosphere, Atmospheric Research, Environmental Earth Sciences, International Journal of Climatology, Monthly Weather Review, Natural Hazards, Theoretical and Applied Climatology, Journal of Hydrology and are referenced and indexed in world-renowned Scopus and web of Science databases. The total number of points on indicator D sub-indicator 10 is 120.

**3. Participation and project management.** Dr. L. Bocheva has managed 2 projects from the research plan of NIMH with external funding. She has participated in: 1) 4 projects funded by external sources for Bulgaria; 2) 2 projects under the NSF; 3) 15 projects financed by other national funds of the Ministry of Environment and Water, Ministry of Regional Development and Public Works, „Belene“ NPP and others; 4) 10 projects financed from the budget subsidy of NIMH-BAS. According to this list, it can be seen that Dr. L. Bocheva satisfies the requirement of the NIMH Regulations on ZRASRB, Article 53 (1), and item 5.

From the presented information and the number of points on the individual indicators given in the "Summary Table" it can be seen that the candidate Dr. L. Bocheva clearly fulfills the minimal national requirements for holding the academic position of "Associate Professor" at the National Institute of Meteorology and Hydrology.

**4. Research and applied activity.** The research of Dr. L. Bocheva is in the areas of climate change, Mediterranean cyclones over the territory of Bulgaria, risk assessment and prevention of hazardous meteorological phenomena such as extreme rainfall and thunderstorms. In the applied aspect are activities related to data quality control and data processing at the department "Meteorological experimental data".

**5. Contributions.** The contributions are clearly formulated and reflect the main results in findings within the publications of Dr. L. Bocheva.

### **III. Opinions, recommendations and notes**

I have not found significant inaccuracies and omissions in both the competition documents and the candidate's publications.

#### **Conclusion**

The examination of the submitted materials for the competition did not reveal any violations in the procedure. The requirements are met according to Art. 24 (1), items 1, 3, 4, 5, (2) and Art. 26 (1), of ZRASRB, art. 53 (1), items 1, 3, 4, 5 and Art. 54 of PPZRASRB, art. 53, items 1, 4, 5, 6, 7 and Art. 54 of the NIMH Regulations on ZRASRB.

The scientific publications of Dr. L. Bocheva have been referenced in the world-renowned databases of scientific information Scopus and Web of Science and have received recognition which is referred to by positive quotations from foreign authors. The achieved results, the contributions in the climatology and practice applications give me reason to claim that Dr. L. Bocheva is well recognized specialist in the field of meteorology. I believe that her scientific activity is highly appreciated and I suggest to the members of the scientific jury Dr. L. Bocheva to be awarded the academic title "Associate Professor".

Date \_\_\_\_\_

Scientific Jury Member: \_\_\_\_\_