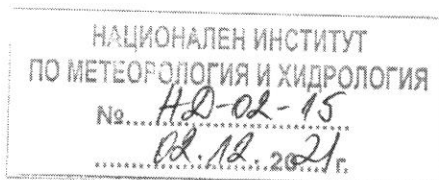


OPINION

by Prof. Nikolay Miloshev



On a procedure for academic position "Associate Professor" in professional field 4.4 Earth Sciences, academic discipline Meteorology, in division Meteorological experimental data, Department Meteorology, National Institute of Meteorology and Hydrology

This opinion has been prepared based on Order № HD-04-21/23.08.2021 of the General Director of NIMH and on the resolution of the Scientific Jury meeting on 15.10.2021. The opinion is in line with the requirements of the Law on the Development of Academic Staff in the Republic of Bulgaria (LDASRB) and the Regulations for its implementation (RILDASRB), Regulations on the Terms and the Regulations for the implementation of the LDASRB in the National Institute of Meteorology and Hydrology.

I. Requirements for the applicant

in terms of art. 24 (1) and art. 26 (1), (2) of LDASRB, art. 53 (1) and art. 54 (1) of RILDASRB and art. 53 (1) and art. 54 (1) from NIMH Regulations based on LDASRB

Dr. Lilia Bocheva graduated from the Faculty of Physics at Sofia University "St. Kliment Ohridski" in 1992 with a degree in Meteorology. She started working at NIMH as a meteorological technician in 1993, and since 1997 she has been working as a physicist in the Distance Methods section, Dep. Weather forecasts. Since 2001 she has been a research associate at NIMH, and since 2007 she has been a senior assistant. In 2019 she became the head of the Meteorological Experimental Data (MED) division, and in 2020 - the director of the Meteorology Department, while at the same time she continued to head the MED department. Her entire career was spent at NIMH, where in 2014 she defended her doctoral dissertation under the supervision of Assoc. Prof. Dr. P. Simeonov.

From the inspection of the submitted materials for the competition, deficiencies and violations in the procedure for eligibility of the candidate to the competition have not been established.

II. Requirements for research and scientific-applied activity

in terms of art. 24 (1), items 1, 3, 4, 5 and art. 26 (1) of LDASRB, art. 53 (1), items 1, 3, 4, 5 and art. 54 of RILDASRB and art. 53, items 1, 4, 5, 6,7 from NIMH Regulations based on LDASRB

Through in-depth acquaintance with the publications, references and documents submitted by the applicant, I can give the following assessment to cover the minimum scientometric national requirements and the requirements of the NIMH Regulations:

Regarding group of indicators A, there is a doctoral degree of the candidate on the topic: "Climate variations and assessment of extreme meteorological phenomena connected with convective storms over Bulgaria (1961-2010)". The applicant also submitted a list of her publications presented in the dissertation, which she did not use further.

In group of indicators B, 10 scientific publications are presented as an alternative to habilitation thesis. These publications are indexed and referenced in the world database - SCOPUS. Thematically, the publications are mainly related to climatic analysis of extreme meteorological phenomena (convective storms, hail, maximum 24-hour precipitation, tornadoes, etc.), as well as presentation of detailed characteristics and estimates of individual severe convective storms. All publications in the group are related to the topic of the competition and in terms of quantity and quality are completely equivalent to a habilitation thesis. The total number of points collected from these publications is 189.5 points with a required threshold of 100 points. This significantly exceeds the required minimum, and here it should be noted that in most publications, Dr. L. Bocheva is the first author.

Regarding group D, 20 scientific publications are presented, distributed as follows: 4 in indexed and referenced in the world database publications (journals and conference proceedings) and 16 in non-refereed journals with scientific review or full-text conference papers. I accept the list of these publications. Thus, the collected points from group D are 204.3, with a required minimum of 200 points. Along with these publications, the applicant has submitted a list of 16 published in full text or as extended summaries of reports in conference proceedings or other publications that they are not included in the evaluation, but are an excellent certificate for significant scientific activity.

Regarding group E, Dr. Bocheva has presented 24 citations in editions from the world database SCOPUS of 7 publications, which bring her 120 points with a minimum threshold of 50 points. I accept the citations presented in group D not only as satisfactory, but also as significantly exceeding the minimum requirements.

The last group of indicators E sets zero minimum requirements for the selection of an associate professor. However, in the Rules of the NIMH under the Law on Academic Affairs, Chapter III - conditions and procedure for holding academic positions, section four - conditions and procedure for holding the academic position "Associate Professor" in item 5 of Article 53 (1) clearly sets the condition for management of successfully completed research projects with external funding. In her report, the candidate reports on one project led by her and successfully completed with external funding and one with internal funding. The number of projects in which she is a participant is significant:

- European projects - 4
- Projects funded by the Research Fund - 2
- Externally funded projects (excluding NSF) - 15
- Internal financing projects - 10

The participation and management of so many scientific projects speaks of the high level of scientific training of Dr. L. Bocheva, both in the field of processing, evaluation and analysis of meteorological information and in climatic variations of extreme meteorological phenomena.

When summing up the collected points for all groups of indicators, 563.8 points are received (without projects) with a minimum threshold of 400 points. Thus, both for the individual groups of indicators and in total Assistant Professor Dr. Lilia Bocheva fully meets and exceeds the minimum scientometric national requirements and the requirements of the NIMH Regulations.

The candidate summarizes part of her publications in 4 scientific contributions related to the study of the paths of Mediterranean cyclones and related dangerous

meteorological phenomena; with regionalization of potentially dangerous precipitation in Bulgaria and with climatic analysis of various groups of dangerous phenomena related to the development of convective storms in Bulgaria (thunderstorms, torrential rains, hail, tornadoes and snowstorms). The good citation of these publications shows the importance of the analyzes made and the interest of the scientific community, not only in Bulgaria, in them. The presented 2 applied-scientific contributions are directly related to the development of the meteorological database and the support of the service with hydrometeorological products of the state and society, as well as the storage of the paper archive, according to the recommendations of the WMO. As can be seen, most of the developments are in practice the implementation of software products and other structures in the operational activities of NIMH.

III. Opinions, recommendations and remarks

Presented by Chief Assistant Dr. Lilia Bocheva scientific production in terms of volume, structure, quality of scientific results and contributions outline her profile of a well-established and prominent researcher in the scope of the issues of the announced competition.

Conclusion

The inspection of the submitted materials for the competition did not reveal any violations in the procedure. The requirements under Art. 24 (1), item 1, item 3, item 4, item 5, (2) and Art. 26 (1), of ZRASRB, art. 53 (1), item 1, item 3, item 4, item 5 and Art. 54 of PPZRASRB, art. 53, item 1, item 4, item 5, item 6, item 7 and Art. 54 of the Regulations of NIMH under ZRASRB

Based on the acquaintance with the documents of the candidate for the competition and the evaluation, according to art. 27 (3), (4) of ZRASRB of the publications presented by it, I confidently call on the members of the scientific jury in this competition to recommend to the Scientific Council of NIMH to award Ch. Assistant Professor Dr. Lilia Ivanova Bocheva the academic position of "Associate Professor".

Data: ~

MEMBER OF THE SCIENTIFIC JURY: