

REPORT

by Prof. Dr. Plamen Georgiev Ivanov, Geological Institute at BAS

Regarding: Competition for the academic position of "Associate Professor" in professional field 4.4. Earth Sciences, scientific specialty "Geology of the Oceans and Seas", Scientific field: "Paleoclimate and Geoecology of the Black Sea" at the Institute of Oceanology at BAS - Varna (IO-BAS), announced in the State Gazette No. 63 / 01.08.2025.

The opinion was prepared in connection with the order of the Director of the Institute of Oceanology - BAS, Varna No. 300 of 26.09.2025 and the decision of the first meeting of the Scientific Jury, held on 10.10.2025. The only candidate in the competition is **Chief Asst. Dr. Krasimira Ruseva Slavova**. The materials submitted by the candidate meet the requirements of the "Law on the Development of the Academic Staff in the Republic of Bulgaria", "Regulations for the Implementation of the Law on the Development of the Academic Staff in the Republic of Bulgaria" and "Regulations on the Conditions and Procedure for Acquiring Educational and Scientific Degrees and for Holding Academic Positions at the Institute of Oceanology - BAS". The candidate meets the minimum required points by groups of indicators for holding the academic position of "Associate Professor" and is admitted to assessment in this competition.

Dr. Krasimira Slavova is a Master of Ecology - Ecology and Environmental Protection at the Naval Academy "Nikola Yonkov Vaptsarov", Varna, Faculty of Civil Engineering (1997). She defended her educational and scientific degree "Doctor" in the scientific specialty "Oceanology" at the Institute of Oceanology - BAS (2004).

From 2005–2011 she was a senior lecturer as an Oceanologist, and since 2011 she has held the academic position of "Chief Assistant" in the section "Marine Geology and Archaeology", Institute of Oceanology at BAS. Dr. Krasimira Slavova is a participant in 8 national and 15 international research projects.

Publication activity.

In the competition for Associate Professor (Docent), Dr. Krasimira Slavova participated with 34 scientific papers, which do not repeat the publications submitted for the acquisition of the educational and scientific degree "Doctor". The submitted works fully correspond to the professional field and scientific specialty for which the competition is announced. The list includes:

16 scientific publications in publications that are referenced and indexed in world-renowned databases of scientific information - WoS and SCOPUS;

18 scientific publications in publications not indexed in WoS, Scopus, ERIH+ or other profiled databases, thematic collections, including collections of international and national scientific forums.

6 of the publications in publications referenced and indexed in world-renowned databases of scientific information were used for the Habilitation Thesis.

Of the publications submitted for the competition, the candidate is the first author in 12 of them. There are 28 publications in English, and the remaining 6 - in Bulgarian.

The publications are distributed in the following scientific publications:

Q1 (× 25 pt.)	4
Q2 (× 20 pt.)	2
Q3 (× 15 pt.)	7
Q4 (× 12 pt.)	1
WoS/Scopus without SJR and without IF (× 8 pt.)	2
Other scientific publications (× 6 pt.)	18

In addition, the candidate has participated with scientific reports in a number of international and national forums (17).

Citations of the publications in the competition

According to this indicator, the candidate significantly exceeds the requirements (487 points), which testifies to the good quality of his scientific works and the scientific interest shown in them.

The citations presented by the candidate in the competition are 115 (cited publications: 16). The most citations are in scientific publications, referenced and indexed in Web of Science or Scopus (81); In monographs and collective volumes with scientific review (14); In non-refereed journals with scientific review (20).

Scientific and applied scientific contributions of the candidate

The reference for the scientific contributions of the candidate Dr. Krasimira Slavova shows that he has significant scientific and applied scientific contributions in the Scientific specialty: "Geology of the oceans and seas" and Scientific direction: "Paleoclimate and geocology of the Black Sea", which can be summarized in the following thematic areas:

- Study of correlations between data from different paleoclimatic archives (cave deposits and sediments) and different dating methods
- Supplementation and refinement of the existing models for paleoexchange of water masses between the Aegean, Marmara and Black Seas and the existing chronostratigraphic schemes for the Black Sea area.
- Criteria have been established for studying the transition of the Black Sea basin from a regressive lacustrine phase to a transgressive marine phase at the end of the early Holocene.
- Interpretation and reconstruction of the evolution of the Black Sea basin during the Late Pleistocene-Holocene.
- Detailed reconstruction of the paleoclimatic and paleoecological changes in the Black Sea region and basin during the last ~26,000 years.
- A curve of the averaged surface salinity for the Black Sea basin for the last 20,000 years has been derived.
- Application of a new approach to obtain data on the carbon stored in coastal marine sediments
- Investigation and assessment of the contamination of the Black Sea sediments with radionuclides and heavy metals and the pollution of the marine environment with floating debris.

A significant part of the scientific contributions is related to the study of coastal and deep-sea sediments of the Black Sea, in order to establish correlations between climate change, changes in the paleoecological conditions of the basin, sea level fluctuations and the dynamics of deposition of Late Pleistocene and Holocene sediments after the last glacial maximum – Würm III. The interpretation and reconstruction of the evolution of the Black Sea basin are in the context of the

interrelationship between the various paleoindicators of the environment and paleoclimatic changes during the period under consideration.

In addition, the following scientific and applied contributions can be noted: I. Contribution to the development of documents related to sampling and sample preparation of sediments for analysis with nuclear analytical techniques; II. Integration of data on sediments from the Black Sea area, obtained using nuclear analytical techniques, in the database of the IAEA Marine Radioactivity Information System (MARiS); III. Applying a new approach for better interpretation of paleoclimatic, paleoecological and paleogeological data on the evolution of the Black Sea basin during the early Holocene.

I believe that the presented contributions are the personal work of the candidate and are on the topic of the competition. Participation in various research projects contributes significantly to the expansion of the candidate's research activities, adding contributions to the study of the ecology of the Black Sea - the pollution of the Black Sea sediments and the marine environment with radionuclides, heavy metals and floating debris. The new data obtained, in the context of modern climate change and the anthropogenic pressure, are a contribution to scientific research in the field of geoecology of the Black Sea sediments.

Critical remarks and recommendations. I have no critical remarks about the candidate's scientific work. The recommendations related to his future activities are standard: 1) to pass on his experience and knowledge as a scientific supervisor of a doctoral student; 2) to continue his scientific research by publishing primarily in journals of categories Q1 and Q2.

Conclusion

The set of documents and materials presented by **Chief Asst. Dr. Krasimira Ruseva Slavova** for participation in the competition shows that, in terms of scientometric indicators, scientific publications, the scientific and applied scientific contributions contained therein, citations, participation in projects, relevance of the researched problems, etc., fully meet the requirements of the "Law on the Development of the Academic Staff in the Republic of Bulgaria", "Regulations for the Implementation of the Law on the Development of the Academic Staff in the Republic of Bulgaria" "Regulations on the Conditions and Procedure for Acquiring Educational and Scientific Degrees and for Holding Academic Positions at the Institute of Oceanology - BAS".

This gives me reason to give my **positive assessment** of the candidate's scientific and professional activities by recommending to the members of the Scientific Jury of the competition to propose to the Scientific Council of the Institute of Oceanology at the Bulgarian Academy of Sciences - Varna that **Dr. Krasimira Ruseva Slavova** be elected to the academic position of "**ASSOCIATE PROFESSOR**" (Docent) in the professional field 4.4. Earth Sciences, scientific specialty "Geology of the Oceans and Seas", for the needs of the Institute of Oceanology at the Bulgarian Academy of Sciences - Varna.

03 November 2025

Signature: 

(Prof. Dr. Plamen Ivanov)