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OPINION

by assoc. prof. Mihaela Nikolova Nedyalkova PhD, Institute of Biodiversity and Ecosystem  
Research - BAS

in connection with the competition for the academic position of "Associate Professor" of IBER-BAS, in: field of higher education 4.3. Ecology and Ecosystem Conservation.

By Order No. 53/12.06.2025 of the Director of IBER-BAS I have been appointed as a member of the scientific jury of the competition for the academic position of Associate Professor at IBER-BAS in the field of higher education 4.3. Biological sciences, professional field Ecology and Ecosystem Conservation, announced for the needs of the section "Community Ecology and Conservation Biology". In the competition for "Associate Professor", announced in the State Gazette, №32/15.04.2025 and on the Internet page of IBER-BAS for the needs of the Section "Community Ecology and Conservation Biology", as the only candidate participated assist. prof Angel Valentinov Dyugmedzhiev PhD.

Presented by assist. prof Angel Dyugmedzhiev's set of materials is in accordance with the Regulations for the Development of Academic Staff of IBER-BAS, BAS and the Regulations for the Implementation of the Law on Academic Staff Development, and includes all necessary documents.

The candidate assist. prof Angel Dyugmedzhiev has enclosed a total of 31 scientific papers and 1 book chapter. According to the submitted by the candidate reference for compliance, 26 scientific works and 1 book chapter, which are outside the dissertation, as well as 2 publications, which are not included in the indicators for occupying the academic position "Associate Professor", are accepted for review.

Dr. Angel Dyugmedzhiev graduated with a Master's degree in Zoology at the Faculty of Biology, Sofia University "St. Kliment Ohridski" in 2013. In the period 2015 - 2020 he was a full-time PhD student in Zoology at the National Museum of Natural History of the Bulgarian Academy of

Sciences, where he obtained the educational and scientific degree "Doctor". Since 2018, he has been working successively as an assistant and senior assistant in the section "Community Ecology and Conservation Biology" of IBER - BAS.

In terms of research, the candidate has attached 26 publications and one book chapter. They are distributed as follows: for indicator B - 8 issues of which 1 in Q1, 4 in Q3 and 3 in Q4; for indicator G - 16 issues of which 1 in Q1, 2 in Q2, 2 in Q3, 2 in Q4, 11 in SJR journals, and 1 book chapter. Thus, on indicator B, the total number of points is 116 out of the required 100, and on indicator G, 244 out of the required 220. There are also 49 citations submitted out of the required 30 in IF and SJR journals, yielding a total of 98 points. Thus, on all indicators the applicant meets and even exceeds the required number of points according to the Regulations for the Implementation of the Law on Academic Staff Development, BAS and the increased criteria of IBER - BAS.

The scientific papers submitted for the competition have both scientific and applied character in the field of herpetology. The research related to the study of the ecological-physiological, population and behavioral features of the viper (*Vipera ammodytes*) is leading and of fundamental importance. The composition of the skin secretions of the viper has also been established, some of which may play a major role in the chemical communication of the species. Subsequently, the composition of the skin secretions of 13 other snake species from Eastern Europe, North Africa and the Middle East was also determined, which, in addition to chemical communication, play a role in skin permeability and animal defense.

Research on other amphibians and reptiles on the relationship between body temperature, environmental temperature, taxonomic affiliation, climatic features and behavior of species from different habitats around the world is equally important. The results of such a large-scale study are a major contribution to the understanding of the mechanisms of chemical and physical thermoregulation in heliothermic and non-heliothermic species, and are a fundamental mechanism of animal adaptation to environmental conditions.

The results of studies on a range of inter- and intraspecific behavioral relationships in reptiles, not only in Bulgaria but also globally, are fundamental and provide a solid basis for further research in this area.

The scientific and applied contributions of the candidate have a clear methodological orientation with a drive towards adapting and applying increasingly less invasive and non-invasive methods in the study of amphibians and reptiles.

In conclusion, I can summarize that the candidate has presented a sufficient number of scientific works published after the materials used in the defense of the PhD. His works contain original, important and interesting results that have received international recognition and a representative part of them have been published in journals published by reputable academic publishers. I would also like to express my satisfaction with Dr. Dyugmedzhiev's previous work in an extremely interesting field of science. Many of the results of his research are of a contributory nature, some of them even of global significance. All this, as well as my personal impressions of the candidate, gives me reason to think that Dr Angel Dyugmedzhiev is a well-established specialist in his field and I believe with conviction that he is fully prepared and deserves to take up the academic post of Associate Professor.

After reading the materials and scientific works presented in the competition, analyzing their significance and scientific and applied contributions contained in them, I find it justified to give my positive assessment and to recommend the Honorable Scientific Jury to prepare a report-proposal to the Scientific Council of IBER-BAS for the election of Dr. Angel Valentinov Dyugmedzhiev to the academic position of "Associate Professor" at IBER - BAS in: field of higher education 4. 3 Biological sciences, professional field.

09. 08. 2025.

Prepared by: .....

assoc. prof. Mihaela Nedyalkova PhD