



NATIONAL MUSEUM OF NATURAL HISTORY
Bulgarian Academy of Sciences 1, Blvd. Tsar Osvoboditel, 1000 Sofia, Bulgaria
Phone: ++359 878 668 880; e-mail: boev@nmnhs.com; zlatozarboev@gmail.com; zlatozarboev@yahoo.com

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STATEMENT

on the competition for the academic position of "Professor" in the professional field "4.3. Biological Sciences", scientific specialty "Ecology and Ecosystem Conservation" for the needs of the section "Communities Ecology and Conservation Biology" at the Department "Ecosystem Research, Ecological Risk and Conservation Biology" of IBEI-BAS, announced in the State Gazette, issue 63/01.08.2025

by Dr. Prof. Zlatozar Boev, D. B. S. in the Department of "Vertebrates" at the National Museum of Natural History at BAS

Only one candidate submitted regular documents for the competition within the legally announced deadline - Assoc. Prof. Dr. Simeon Petrov Lukanov, scientist at the Institute of Biodiversity and Ecosystem Studies at BAS (IBEI-BAS). Since 2014 he has been an associate professor at the institute. This statement is in fulfillment of the order of No. 85/29.09.2025 of the Director of the NPM-BAS.

1. General data on the career and thematic development of the candidate

The candidate is 41 years old and has 11 years of work experience. He received his "Master's" diploma in "Biology" at the Faculty of Biology of Sofia University "St. Kliment Ohridski" (2009), and his "PhD" in "Ecology and Conservation of Ecosystems - Behavioral Ecology" - at the Faculty of Biology of Sofia University (2014). He currently works as an "Associate Professor" at the Institute of Biological and Ecological Sciences-BAS in Sofia.

He published his first scientific research in 2011 at the age of 27. He is well acquainted with the animal world of Bulgaria and the contemporary problems of the natural environment. He impresses with his consistent and impartial pedantry in his assessments and decisions. He has been invited by the editorial boards of dozens of international specialized scientific journals as a reviewer of scientific publications. In this competition, the candidate presents a list of 21 scientific works outside the dissertation work for the acquisition of the PhD degree and after his habilitation as an associate professor.

2. Main directions of the candidate's research work and most important scientific contributions

Assoc. Prof. S. Lukanov groups his main contributions into 5 areas: (1) Population Ecology; (2) Faunistics and Biogeography; (3) Systematics and Methodology; (4) Biochemical Ecology; (5) Ecotoxicology. It can be assumed that all of them fall into the scientific specialty "Ecology and

Ecosystem Conservation", since they treat various problems of the structure and functioning of ecosystems.

The reference for scientific contributions formulated by the candidate is detailed, correct and I accept it.

3. Significance of the obtained results, proven by citations, publications in prestigious journals, awards, membership in international and national scientific bodies, etc.

The studies of Assoc. Prof. S. Lukanov were carried out at a modern scientific level (both fieldwork and data processing and analysis). Their results are widely accepted by the global scientific community in his field. This is also indicated by the total of 164 citations found (excluding auto- and hidden auto-citations) of 31 of his publications submitted for this competition.

The candidate has an h-index of 11 and according to him is ranked 1468th among scientists in Bulgaria.

4. Most significant scientific and applied achievements, outlining their social significance.

Significant contributions to the study and conservation of the amphibian and herpetofauna of Bulgaria are:

1. The description of a new (Rhodope) subspecies of the yellow-bellied toad (*Bombina variegata rhodopensis*) and the establishment of the late Miocene invasion of the species in Central Europe are contributions of a fundamental nature;
 2. The establishment of a twice wider distribution of *Triturus cristatus* and *Natrix tessellata* than previously known in Bulgaria;
 3. The establishment of a new isolated population of the Macedonian lizard (*Podarcis erhardii*) in Bulgaria;
 4. Establishment and mapping of the distribution of amphibians in arable lands in Bulgaria;
 5. Study of the distribution of reptiles in the Kresna Gorge;
 6. Development of specialized software for individual recognition of vipers (*Vipera ammodytes*);
 7. Establishing the harmful effects of ammonium nitrate on some species of tailless amphibians, etc.
- In fact, many of his studies also have applied significance, because studying unknown aspects of the biology of rare species is the most important condition for developing effective measures for their conservation.

5. Demonstrated skills or aptitude for leading scientific research (project management, attracting external funding, etc.).

The candidate has been the head of 3 scientific research projects funded by the National Research Fund, and a participant in several others.

Indisputable proof that the candidate has the qualities to lead scientific projects are their final products - dozens of publications in prestigious international journals, cited hundreds of times by scientists all over the world.

6. Profile of scientific research work

Almost all of the candidate's publications fall into the field of vertebrate zoology (herpetology and batrachology), which clearly outlines his profile. This is evident from the topics of scientific papers,

scientific projects and the profile of the journals in which he has published or been cited. All of them, insofar as they are essential components of zoocenoses in ecosystems, entirely fall into the field of professional direction 4.3. "Biological Sciences" and specialty "Ecology and Conservation of Ecosystems". In addition to reptiles and amphibians, the objects of the candidate's research are also small rodents from Bulgaria.

7. Role of the candidate in the training of young scientific personnel

Assoc. Prof. S. Lukanov has one successfully defended doctoral thesis, who received the PhD degree. In 2014, at the Faculty of Biology of Sofia University "St. Kliment Ohridski", the candidate taught 3 courses: (1) "Bioresources", (2) "Ecology and Environmental Protection" and (3) "Ecological Monitoring" with a total teaching time of 67 hours.

8. Some notes

(Not ordered by importance)

1. The presentation of the contributions contains a lot of descriptive, methodological, etc. information and/or results and even a literature review, which are not in essence contributions at all. Here, scientific contributions are expected to be clearly and briefly formulated. This was not done. Just one example: The contributions in item "1) Population characteristics of the Buresch newt" are presented in 38 lines, only 5 of which actually contain contributions mixed with results.

2. In item "2) Population characteristics of the great crested newt." in the "Report of contributions ..." irrelevant information is presented, e.g. "The most common prey for both sexes was larvae ...", "Male newts are more likely than females ...", "Results for seasonal activity ..." (assuming that contributions should be presented here, not results.), etc.

3. Incorrect use of terms: "distribution ranges".

9. A reasoned conclusion, unequivocally recommending the selection or not of the respective candidate

Table 1. Comparison of the values of groups of scientometric indicators of the candidate with the minimum requirements according to the PZRAS of IBER-BAS

Group of features	Minimal values of the features according requirements of IBER-BAS	Values of the features of the candidate Simeon P. Lukanov
A	50	50
Б	-	-
B	100	100
Г	200	266
Д	100	328
E	150	389
Total	600	1133

Based on the distinguished scientific, scientific-applied and teaching contributions, I believe that Assoc. Prof. Simeon Petrov Lukanov fully meets and significantly exceeds (Table 1) the specified criteria for obtaining the academic position of "Professor" in "4.3. Biological Sciences", scientific specialty "Ecology and Ecosystem Protection", at the Department "Ecosystem Research, Ecological Risk and Conservation Biology" of IBEL-BAS. His total score in points is 188% of the required minimum. The materials submitted for the competition cover (and according to the adopted criteria of IBEL-BAS) all scientometric criteria.

Therefore, I very confidently propose to the esteemed Scientific Council of IBEL-BAS to vote "yes" for the candidate to receive this academic position of "Professor".

Sofia, 20.10.2025

Written by:
(Zlatozar Boev)