

STANDPOINT

by

**Peter Stoykov Boyadzhiev, Associate Professor PhD, Department of
Zoology, University of Plovdiv "Paisii Hilendarski",**

on: material submitted for participation in the competition to occupy the scientific position of "**Associate Professor**" of Plovdiv University "Paisii Hilendarski"

in: the field of higher education 4. Natural sciences, mathematics and informatics, professional direction 4.3. Biological sciences (Zoology – Vertebrate Zoology).

In the competition for the title of "Associate Professor", announced in "State Newspaper", no. 98 dated 11/19/2024 and on the website of Plovdiv University "Paisii Hilendarski" for the needs of the Department of Zoology of the Faculty of Biology, Chief Assistant Professor PhD Vessela Ilieva Mitkovska, from the above-mentioned unit, has applied for this position.

1. General information about the procedure and the applicant:

The documents submitted for habilitation from the Chief Assit. Prof. Vesela Ilieva Mitkovska, correspond to the set of criteria and indicators for occupying the academic position of "Associate Professor", according to the ZRASRB (Law on the Development of the Academic Staff in the Republic of Bulgaria), the Regulation on its implementation and the Regulation on the development of academic staff of the Plovdiv University "Paisii Hilendarski".

The set of material submitted by Chief Asst. V. Mitkovska on paper corresponds to the Regulation on the development of the teaching staff of Plovdiv University. In the current competition, Chief Assit. Prof. Mitkovska participated with a total of 22 scientific works - 21 scientific publications and 1 collective monograph, which were not used in the procedures for obtaining the educational and scientific degree of "Doctor" and for occupying the academic position of "Chief Assistant Professor", as well as 50 citations in scientific publications referenced and indexed in world-famous databases with scientific information (Web of Science and Scopus). In connection with the additional requirements of the Faculty of Biology, the following are also attached: 2 textbooks; a list of 7 graduates who successfully defended their diplomas in the relevant area of the competition; participation in 7 national projects, 1 international project and 2 national

programs; participation in the administrative activities of the faculty - in the committees for accreditation procedures, the committee for the quality of education, etc.

The candidate's contribution is reflected in the following important achievements: For the first time in Bulgaria, the Comet Assay method was used for biomonitoring purposes to assess DNA damage expressed through single- and double-strand breaks and alkali-labile regions; A combined approach of two molecular genetic biomarkers (Micronucleus Frequency and DNA Damage) was presented and the importance of the used molecular genetic markers for early, adequate and prognostic assessment of genotoxic stress and mutagenic potential of the environment was demonstrated; For the first time, a parallel quantitative assessment of the differential genotoxic response caused by chronic industrial and agrochemical pollution of surface waters was carried out in natural populations of *Pelophylax ridebundus*; For the first time in the world, DNA damage in *Apis mellifera* spermatozoa was detected and an original Sperm Analysis Protocol was applied; Geno- and cytotoxic effects of maximum permissible concentrations of chlorpyrifos, Ni, Pb and Cd in surface waters on blood cells of juvenile *Cyprinus carpio* were demonstrated when exposed *ex situ*; For the first time in Bulgaria, viral RNA of Dobrava hantavirus and Puumala orthohantavirus was isolated from rodents using real-time PCR and serological studies of four rodent species, four hotspots with high infection risk in the Rhodope Mountains were identified and factors influencing the association of infections with Dobrava hantavirus were assessed; For the first time in Bulgaria, the blood parasite *Trypanosoma musculi* was registered on *Mus macedonicus* and the presence of a blood parasite of the genus *Hepatozoon* on *Pelophylax ridibundus* was recorded in three different locations in the country; The efficiency of the fluorescent dye acridine orange in diagnostics of hemoparasites of the genera *Trypanosoma*, *Bartonella*, *Babesia* and *Hepatozoon* has been confirmed; Standard karyotypes of *Micromys minutus* (Pallas, 1771) and *Apodemus epimelas* (Nehring, 1901) have been described for the first time; The main reproductive parameters of the most widespread mesopredators in the country – *Canis aureus* and *Vulpes vulpes* – have been assessed for the first time in Bulgaria under sympatry conditions.

2. General characteristics of the applicant's activities:

I highly appreciate the candidate's educational and pedagogical activities and preparation (textbooks, lecture courses, work with students, postgraduates and doctoral students), her scientific, research and applied activities (monographs, articles, publications and research projects, scientific

and applied contributions) and citations. All quantitative indicators of the criteria for holding the academic position of "Associate Professor" are met. Chief Assit. Prof. Vesela Mitkovska is a valuable and recognized specialist, both in the department and in scientific circles in the country and abroad.

3. Critical comments and recommendations:

I have no critical comments.

CONCLUSION

The documents and material submitted by Chief Assit. Prof. Vesela Ilieva Mitkovska meet all the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria (ZRASRB), the Regulation on its implementation and the Regulation on the development of academic staff of the Plovdiv University "Paisii Hilendarski".

My personal impressions of the applicant's performance outside the competition are that she has the erudition, abilities and knowledge that allow her to adequately and fully fulfill the requirements and responsibilities that the position imposes, both as a teacher and as a researcher and a person responsible for the problems of others.

In the sense of the above, I recommend that the Scientific Jury prepare a report to the "Faculty Council" of the BF on the election of the Chief Assistant Professor PhD Vesela Mitkovska, in the academic position of "Associate Professor" of Plovdiv University "Paisii Hilendarski", for the needs of the Department of Zoology, in the field of higher education 4. Natural Sciences, Mathematics and Computer Science, professional direction 4.3. Biological Sciences (Zoology – Vertebrate Zoology).

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Prepared the standpoint:

/Assoc. Prof. P. Boyadzhiev, PhD/