

## OPINION

By prof. Prof. Svetlozara Lyubomirova Petkova - Institute of Experimental Morphology, Pathology and Anthropology with Museum /IEMPAM/ BAS, member of the Scientific Jury, appointed by order № RD-15-55/01.11.2024 for the composition of the Scientific Jury

Subject: competition for the academic position of “Associate Professor” in professional field 6.4. Veterinary Medicine, scientific specialty “Parasitology and Invasive Diseases of Animals and Man” for the needs of the Section “Experimental Parasitology” announced in State Gazette No. 85/08.10.2024.

The candidate has submitted the necessary documents for the competition, arranged and systematized precisely. They fully comply with the requirements of the Law on Academic Staff Development and the Regulations on Academic Staff Development at IEMPAM-BAS. The materials are submitted on paper and electronic media as required.

A curriculum vitae has been submitted from which it is evident that the applicant is a Master Veterinarian - she completed her higher education at Trakia University, Stara Zagora, Veterinary Medical Faculty in 2000. Since January 2001 she started working at the Institute of Experimental Pathology and Parasitology, BAS.

In 2005 she defended his PhD thesis on “Influence of NH<sub>4</sub>VO<sub>3</sub> on the development of nematode *Meloidogyne arenaria* (Neal, 1889) Chitwood, 1949 and host tomato”. She is currently a senior assistant at the Section of Experimental Parasitology at IEMPAM-BAS. She has more than 20 years of experience in the system of the Bulgarian Academy of Sciences and works in several thematic areas - bee pathogens, parasitoses of domestic and wild animals, molecular phylogenetic and genetic studies in indigenous animal breeds, grouped respectively as those of fundamental or applied nature, ecology.

In the current competition Dr. Salkova participated with 56 publications of which 10 publications in journals that are refereed and indexed in world-renowned databases. The submitted citations also exceed the minimum required by law.

The total impact factor of the submitted works is 16.7. Participation in 57 scientific forums with 83 papers and posters was noted. Dr. Salkova has participated in a total of 12 scientific projects as a leader or participant /at the FNI-MON and EBR/. Her participation in the projects

shows the opportunity for teamwork and successful collaboration with scientific teams at home and abroad.

The scientific activity and contributions of As. Dr. Salkova is concentrated in several thematic areas - bee pathogens, parasitoses in domestic and wild animals, molecular phylogenetic and genetic studies in indigenous animal breeds, grouped respectively as fundamental or applied:

I. Scientific and fundamental research.

1. 1. Distribution, diagnosis and prevention of the main types of pathogens (parasitic, viral, bacterial and fungal diseases) in the honey bee *Apis mellifera*. Metabarcoding of the bee microbiome, hygienic behavior in bees and their role as a bioindicator.

1. 2. Molecular identification and monitoring of current bee diseases (parasitic and viral). Genetic diversity and origin of pathogenic agents;

1. 3. Distribution, diagnosis, prevention and treatment of current parasitic diseases in wild and domestic animals;

1. 4. Study of the influence of vanadium, various glycosides and radiation exposure on the development of gall nematodes;

1. 5. Molecular-phylogenetic and genetic studies of local animal breeds.

II. Scientific-applied studies.

2. 1. Testing of veterinary medicinal products (VMPs) established in practice to establish (presence/absence) of resistance;

2. 2. Testing of new combinations of essential oils and plant extracts, and studying their impact on the health status of bee colonies;

2. 3. Studying the impact and effectiveness of various antiparasitic agents applied to wild and domestic animals;

2. 4. Recommendations for practice.

The contributions are systematized in detail and provide an idea of the overall scientific, experimental and research work of Dr. Salkova. It is mainly in the field of parasitology with practical significance and the results obtained are of a contributing nature and can be applied in practice. She is a winner of awards and diplomas from various scientific forums.

**Conclusion:**

The documents submitted for the competition fully meet the requirements of the Act on the Development of the Academic Staff in the Republic of Bulgaria and the Regulations on the Terms and Procedure for Acquiring Scientific Degrees and Holding Academic Positions at IEMPAM - BAS. Based on the above, I confidently give my positive assessment for awarding the academic position of "ASSOCIATE PROFESSOR" to Dr. Delka Salkova and with full conviction I recommend to the esteemed members of the Scientific Council of IEMPAM to support the choice with a positive vote.

30.01.2025.

Prof. S. Petkova

