Bx. № 29 Дата 20. Сл. 2025

### STATEMENT

by Assoc. Prof. Dr. Vesselin Nanev,

Institute of Experimental Morphology, Pathology and Anthropology with Museum (IEMPAM) at the Bulgarian Academy of Sciences,

elected as a member of the Scientific Jury on the basis of order No. RD-15-55/01.11.2024 of the Director of IEMPAM - BAS, Sofia

**CONCERNING:** Competition for the academic position of "Associate Professor" at the "Experimental Parasitology" section of IEMPAM - BAS, in the field of higher education 6.

Agricultural sciences and veterinary medicine, professional direction

6.4 Veterinary medicine, scientific specialty, "Parasitology and invasive diseases of animals and humans", for the needs of the "Experimental Parasitology" section at IEMPAM - BAS, published in the State Gazette No. 85 / 08.10.2024.

# Analysis of the candidate's career profile.

Ch. assistant Dr. Delka Salkova is the only candidate in the announced competition for the academic position of "associate professor" at the "Experimental Parasitology" section, IEMPAM, BAS. For the period 1994 – 2000 she graduated from Thracian University-Stara Zagora, Faculty of Veterinary Medicine, where she obtained a Master's degree in Veterinary Medicine. Since 2001, Delka Salkova has been at IEMPAM in the position of "researcher, first degree". At the time of the competition, she holds the academic position of "chief assistant" in the scientific organization (since 2005), "Experimental Parasitology" of IEMPAM.

In 2005, Delka Salkova obtained the PhD after successfully defending a dissertation on the topic: "Influence of NH4 VO3 on the development of the nematode Meloidogyne arenaria (Neal, 1889) Chitwood, 1949 and host tomato". The candidate's main activities as a scientist at IEMPAM include molecular diagnostics at population and species levels, bioinformatic processing of nucleic and protein sequences, and presentation of own and collaborative scientific developments and results. Also consulting and training beekeepers in the diagnosis and treatment of various diseases of bees and brood. Participation in bilateral cooperation projects with Russia, Slovakia and Estonia, as well as in projects at the National Science Foundation and cooperation with other institutions and companies.

Information on meeting the minimum requirements, publication activity and general characteristics of scientific production.

The candidate presents a total of 56 scientific publications, of which 25 articles are in publications indexed in WoS, Scopus, ERIH+, and 31 of her publications are in publications that are not indexed in WoS, Scopus, ERIH+, as well as in scientific thematic collections. The number of participations of the candidate in national and international scientific forums - 61. In the presentations presented by Ch. assistant Dr. Delka Salkova for the competition, there are 6 citations of her publications.

The submitted report on the fulfillment of the minimum requirements for holding the academic position of "associate professor" according to the Law on the State Academic Affairs of the Republic of Bulgaria and the specific requirements of IEMPAM shows a completely sufficient sum of points for indicators A, B, D and E - 516.9 points, which is above the required minimum.

According to the competition, announced in the State Gazette No. 85 / 08.10.2024, ch. assistant Dr. Delka Salkova has submitted the required documents on time, which are in full compliance with the minimum required by the norms adopted by the National Assembly of IEMPAM-BAN, Sofia and ZRASRB and the Regulations for its application in competition for academic positions.

## Evaluation of scientific activity and contributions.

The main part of the scientific activity of Senior Assistant Professor Dr. Delka Salkova over the last twenty years has been focused on several thematic areas - pathogens in bees, parasitosis in domestic and wild animals, molecular-phylogenetic and genetic studies in local animal breeds, grouped respectively as those of a fundamental or scientific-applied nature.

The candidate's scientific contributions are divided into two groups:

- I. Contributions from the dissertation work which I will not consider.
- II. Contributions of fundamental and scientific-applied significance related to this competition and include:

Research of a fundamental scientific nature

- 1. Study of the 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.
- 2. Molecular identification and monitoring of current bee diseases (parasitic and viral). Genetic diversity and origin of pathogenic agents;
- 3. Distribution, diagnosis, prevention and treatment of current parasitic diseases in wild and domestic animals;
- 4. Study of the influence of vanadium, various glycosides and radiation exposure on the development of gall nematodes;
  - 5. Molecular-phylogenetic and genetic studies of local animal breeds.

Research of a scientific and applied nature

- 1. Testing of established veterinary medicinal products (VMPs) to determine (presence/absence) of resistance;
- 2. Testing of new combinations of essential oils and plant extracts, and studying their impact on the health status of bee colonies;
- 3. Studying the impact and effectiveness of various antiparasitic agents applied to wild and domestic animals;
  - 4. Recommendations for practice.

Based on the research conducted by the candidate, she formulated 10 original and 14 confirmatory contributions. The reference to the scientific contributions of Ch. assistant Dr. Delka Salkova is made clearly and precisely. I would like to note that the second recommendation for the practice described by the candidate, regarding the molecular detection of viruses and pathogens in bee products, is a non-invasive approach that allows monitoring of honey bee diseases at the regional and national level. The conducted research is important for beekeeping practice, as it shows the possibility of infection of healthy bee colonies when replenishing food supplies from infected colonies.

I would like to emphasize the candidate's proficiency and application of various microscopic techniques, biological, molecular biological and biochemical methodologies. Also, her experience in

organizing and conducting field and laboratory research and experiments, participation in training programs for beekeepers.

The participation of Ch. assistant Dr. Delka Salkova in 57 scientific forums with 83 reports, as well as 12 projects shows her great activity, competence and ambition.

My personal impressions of the candidate are that she is a contact and organized person, successfully works in a team, purposeful and ambitious in solving scientific problems.

#### Critical comments and recommendations

I have no critical comments or recommendations. The scientific production presented by the candidate fully corresponds to the announced competition in the professional field, 6.4 Veterinary Medicine.

### Overall assessment of the candidate's suitability and conclusion.

The facts listed above give me reason to assume that the candidacy of Senior Assistant Professor Dr. Delka Salkova in the competition announced for the academic position of "associate professor" fully complies with the required mandatory conditions, criteria and scientometric indicators adopted in IEMPAM - BAS on the basis of the ZRASRB and its Implementing Regulations.

I recommend to the esteemed Scientific Jury, appointed in connection with the announced competition, to accept a positive proposal to the Scientific Council of IEMPAM, Senior Assistant Professor Dr. Delka Salkova, to be elected as an associate professor in the field of higher education 6. Agricultural Sciences and Veterinary Medicine, professional field, 6.4 Veterinary Medicine, scientific specialty, specialty "Parasitology and Invasive Diseases of Animals and Humans", for the needs of the "Experimental Parasitology" section at IEMPAM – BAS.

20. 01. 2024 г Sofia

/ Assoc. Prof. Dr. Vesselin Nanev /