REVIEW

On the materials for participation in competition for academic degree "Assoc. Professor" in the field of higher education 6. Agricultural sciences and veterinary medicine, professional field 6.4. Veterinary medicine, scientific specialty "Parasitology and invasive diseases of animals and humans" for the needs of the section "Experimental parasitology" at IEMPAM-BAS, published in the State Gazette no. 10 of February 5, 2021

Reviewer: Prof. DVM Emil Ivanov Sapundzhiev, DSc in PN 6.4. "Veterinary medicine" from the University of Forestry, according to an order of the Director of IEMPAM-BAS № RD-09-9 / 10.03.2021 for the composition of the Scientific Jury and protocol of its first meeting from 14.04.2021.

Candidate for participation in the competition is:

The only candidate from Chief Assistant DVM Veselin Nanev Nanev, PhD, from IEMPAM-BAS, from the Section "Experimental Parasitology".

1. Career development of the candidate

Veselin Nanev Nanev studied a high school course at 39-th Sofia high school in a class with advanced study of biology and chemistry, which he graduated in 1992. He studied as a student at the Faculty of Veterinary Medicine at the University of Forestry in Sofia, from 1994 to 2001, where he graduated with very good result, as a "Master", with a professional qualification "Veterinarian". Subsequently, since 2001 and until now, Dr. Veselin Nanev has been working at IEMPAM-BAS, having passed through the hierarchy of assistant titles and is now a chief assistant. In the same institute on 03.06. 2014 he has defended a dissertation on "Studies of the etiology, epidemiology and pathogenesis of hemonchosis in small ruminants" and was awarded the educational and scientific degree "Doctor" (PhD). He is a member of several prestigious scientific scientific communities - the Bulgarian Parasitological Society, the European Federation of Parasitology, the World Federation of Parasitology. He has participated in more than 35 scientific forums in Bulgaria and abroad, for some of which he has been awarded diplomas and greeting addresses. He is fluent in English and Russian, and has very good skills in working with computer programs and specialized electronic equipment. In his work he demonstrates and incorporates modern parasitological, biochemical and mathematical methods, which perfectly uses and shares with his colleagues. Along with the scientific theoretical and practical and research skills, he also performs the administratively engaging activity, as responsible for the registrations in NACID-MES of the colleagues from the institute. According to an official certificate from IEMPAM as of 19.03.2021 he has nineteen years of experience in the specialty.

2. Conformity of the submitted documents and materials of the candidate with the required ones according to the Regulations for RAS in IEMPAM-BAS

During the inspection of the documentation submitted for the competition, full compliance with the required documents is established, according to the Regulations for development of the academic staff at IEMPAM-BAS. The materials of Dr. Veselin Nanev are presented on paper and electronic media. It is noteworthy that they are precisely completed, according to the established procedure for such procedures and are described in an understandable way. The attached copies of the sections correspond to the description and are numbered and arranged adequately, which is the basis for their reference.

3. Assessment of the teaching activity of the candidate

No documents or evidence have been submitted for participation in the teaching activities of the applicant Dr. Veselin Nanev, which, however, is not a required criterion for the growth of candidates for academic titles in IEMPAM-BAS. It can be assumed, however, that the candidate is gaining experience in this area, which can be judged by his participation in scientific schools, conferences and other forms of preparation for doctoral credits.

4. Assessment of the candidate's scientometric indicators:

4.1. Participation in scientific, applied and educational projects

Dr. Veselin Nanev has attached a reference for participation in a total of 13 research projects, of which 6 are with the NSF-MES, 3 are foreign-funded, and 4 are EBRD. In the topics of all of them the parasitological direction and methods for laboratory diagnostics are evident, which outline the need for his participation and competencies. It makes a very good impression that the research projects are prepared and implemented by teams of specialists in Bulgaria and / or abroad with different scientific specialties and qualifications, which speaks of the opportunities of Dr. V. Nanev to work in a team and contribute to implementation of larger interdisciplinary research.

4.2. Characteristics of the published scientific results

In the current competition for the academic position of "Associate Professor", according to the list attached to the documents and the Table, including a reference for compliance of the points with the National Minimum Scientometric Requirements (NMSR) and the increased minimum requirements of BAS, Dr. Veselin Nanev published in full text in magazines in Bulgaria and abroad, which have an impact factor or are referenced in prestigious archives for a database indexed in WoS or SCOPUS. Of this number, 18 publications are published in journals, referenced and indexed in the international databases of Web of Science and SCOPUS, 4 of them are in international scientific journals with impact factor and quartile Q4, respectively, another 5 are from quartiles Q1, Q2 and Q3, and other 9, which do not fall into the quartiles, but are reflected in this indicator, and 50 are in specialized publications with ISSN and ISBN, and the remaining 9 are in thematic collections of conferences from scientific forums in Bulgaria and abroad. The total IF of the publications is 1,204. In scientific publications, Dr. V. Nanev is the first or

corresponding author of 23 (30%) of them, and another 27 (35%) of them is also a second or third author, which shows his significant personal contribution to the conduct of research, processing and publication of the results obtained.

Distributed by content of the indicators from Appendix 3 of the NMSR (Table 1 of the documents) Dr. Veselin Nanev has a defended dissertation in the same specialty of the competition for "Associate Professor" (the topic and data are reflected above) and related 5 scientific publications, through which it implements with 50 points NMSR indicator A1.

According to the indicators in group B, Dr. V. Nanev presents 10 publications, with the equivalent of habilitation work (monography), which gives a total of 151 points (B4), with a required minimum of 100 points. The topics of the articles are dedicated to the main direction V. Nanev and the section "Experimental parasitology" have been developing for many years, namely studies of helminthic parasitic diseases and the parasite-host relationship, condition in microelement deficiency of the host and osteoregeneration in transplanted bone substitutes in recipients. This outlines his professional field and the scientific specialty in which he has the competencies of a specialist - parasitologist.

According to the indicators from group D, for which the NMSR is 200 points, it is reflected in total 263 points, as from articles and reports published in scientific journals, referenced and indexed in world-famous databases with scientific information respectively 186.9 points (D7), and from articles and reports published in unreferred journals with scientific review or published in edited collective volumes there are 75,683 points (D8). All these articles have a parasitological direction and with their publication the scientific community accepts them and recognizes the scientific value of the data obtained and their reliability and significance, which emphasizes the role of Dr. Veselin Nanev.

According to the scientometric indicators from section D13, citations or reviews in scientific journals, referenced and indexed in world-famous databases with scientific information or in monographs and collective volumes, the reference for the competition presents the citations of scientific papers found in world databases with the participation of e. Veselin Nanev. According to them, it is evident that he has 10 citations (without self-citations) and are in international scientific journals, which collects 150 points at NMSR 60 points, which is a reflection of the relevance of scientific research and international interest in the results of Dr. V. Nanev from the specialized parasitological researches and publications with his participation.

4.3. Contributions of the candidate (scientific, scientific-applied, applied)

The scientific contributions of the individual publications are diverse, but synthesized purposefully in the field of parasitology and experimental models in studies of invasive parasitosis in animals and humans. They are based on both classical parasitological research and specialized paraclinical methods used in the diagnosis of animals included in the studies, in order to clarify the etiology, pathogenesis and morphogenesis of some known but problematic for parasitology

helminthic invasions. Scientific assets include efforts to establish the trace element status of the helminth-host system, experimental tests to normalize homeostasis, antioxidant and mineral balance of the host under the influence of new metal compounds, sources of nutrients (manganese, copper and zinc). studies of the oxidative-antioxidant status of hosts with helminthic parasites, tests of the action of two stress factors in experimental animals, monitoring of the parasite-host system as a bioindicator of heavy metal pollution of the environment and development of an approach by biochemical, morphological and in vivo elemental studies in rabbits and rats to test new compounds as bone substitutes for use in general and dental human and veterinary medicine.

In this regard, in assessing the results achieved, the importance of the identified micronutrient imbalance and the application of appropriate micronutrients to compensate for the deficit in the host is highlighted. The degree of bioaccumulation of the elements Zn and Cu in the tissues of the hosts is proved by original work, as the supplementation with microelements is in accordance with their deficiency and the physiological parameters in the animals, which are treated with antihelminth drugs, are monitored.

In another series of studies, an experimental model system traces the antioxidant protection of infected hosts and identifies a complex set of modern biomarkers for detecting antioxidant stress. The contribution of these investigations is original and has scientific and practical application for the control of parasitosis through targeted supplementation with antioxidants.

Researches related to the study of the effects of toxic compounds (diethylnitrosamine and toxic metals) on the host-parasite system in laboratory and field tests have a similar original character and contribution to parasitology, biogeochemistry and ecology. The bioaccumulation index of heavy metals in helminths has been determined by successfully applied mathematical methods and it has been proven that mainly endohelminths accumulate selectively toxic elements (lead, cadmium, zinc, manganese, copper) to a significantly higher degree than hosts. In terrestrial conditions, the endohelminth wildlife system is a suitable and timely bioindicator for heavy metal pollution of the environment. It turns out to be a suitable and earlier indicator for assessing the complex impact of the two stress factors (heavy metals and parasites) on the host organism and in particular on its microelemental and antioxidant status.

Significant scientific results have been achieved by testing the possibilities for bone regeneration of various types of pastes and cements for bone implants, as products of nanotechnology. Histological parameters, antioxidant protection, hematological parameters in rodent recipients with and without implants in bone defects were comprehensively monitored for the first time, and the markers of bone metabolism, indicators of hepatotoxicity, oxidative and mineral status were studied. Thus, it is established that the biological response during the implantation of the studied materials and the regeneration of the bone tissue can be traced in the dynamics of the processes of osteogenesis and osteointegration.

In the final analysis of the contributions from the scientific publications of Dr. Veselin Nanev, I can emphasize that the achieved results are of very high quality and scientific value, which is evidenced by the interest of the international scientific community and the citations of these studies during the last 5 years in representatively referenced scientific journals.

As a recommendation, I would like to note that in the attached report on contributions the data can be displayed in a more specific and abbreviated format and can be classified according to their type: scientific-theoretical, scientific-applied and/or methodological. Also, the candidate for the competition should develop and publish a monograph, which will outline his role as a scientist and specialist with a defined profile and direction. It is desirable to show clearer initiative and to be realized as a lecturer and teacher in various educational courses and especially in the field of higher education.

CONCLUSION:

The attached comprehensive materials and documents fully testify to compliance with the Unified State Requirements, the Regulations on the terms and conditions for obtaining scientific degrees and holding academic positions at BAS and the Law on the Development of Academic Staff in the Republic of Bulgaria.

Based on the general description of the submitted materials and the covered NMRS for each individual group of indicators, as well as the generally obtained high scientometric data, which exceed NMSR, for the professional scientific direction of the competition, and on the basis of the shown scientific contributions and scientific results, I give a positive assessment, and I believe that the candidate meets the requirements for holding the academic position of "ASSOCIATE PROFESSOR", and therefore I strongly recomend the esteemed members of the Scientific Jury to support the positive vote and I propose that DVM Veselin Nanev Nanev, PhD, to be elected "ASSOCIATE PROFESSOR" in the scientific field 6. "Agricultural sciences and veterinary medicine", professional field 6.4. "Veterinary medicine", in the scientific specialty "Parasitology and invasive diseases of animals and humans" for the needs of the Section "Experimental parasitology" at IEMPAM-BAS and to be proposed to the Scientific Council of IEMPAM-BAS for approval.

Reviewer's signature: .....
(Prof. DVM E. Sapundzhiev, PhD, DSc)

The review was prepared on: 12. 05. 2021.