OPINION

НАЦИОНАЛЕН ЦЕНТЪР ПО ОБЩЕСТВЕНО ЗДРАВЕ И АНАЛИЗИ
Изх. №: ..... 20 .....
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for participation in a competition for appointment to an **associate professor**'s academic position in 7.1. "Medicine", "Hygiene", advertised in the State Gazette No. 14 of February 19, 2021,
Candidate: **Chief Assistant Professor Vesela Ivanova Georgieva, MD, Head of "Department of microbiological factors",** Analytical and Laboratory Activities Directorate**, National Center of Public Health amd Analyses**
Member of the Scientific Jury: **Prof. Zapryana Rangelova Denkova, DSc, Department of Microbiology, UFT-Plovdiv.**

ABREVIATIONS USED:
NCPHA - National Center of Public Health amd Analyses
UFT – Plovdiv – University of Food Technologies, Plovdiv
ASDARB – Academic Staff Development Act in the Republic of Bulgaria
RIASDARB – Regulation on the Implementation of the Academic Staff Development Act in the Republic of Bulgaria
RNCPHAIASDARB - Regulations of the NCPHA on the Implementation of the Academic Staff Development Act in the Republic of Bulgaria

Designation of the Indicator / Indicator Group in Cyrillic	Designation of the Indicator / Indicator Group in Latin
А	A
Б	B
В	C
Г	D
Д	E
Е	F

1. General characteristics of the candidate's research and scientific activities

Vessela Ivanova Georgieva, PhD, MD, is a Chief Assistant Professor and Head of "Department of Microbiological Factors", Analytical and Laboratory Activities Directorate, NCPHA. The presented documentation is in full compliance with the requirements of the Academic Staff Development Act in the Republic of Bulgaria (ASDARB) and the Regulations of the NCPHA on the Implementation of the Academic Staff Development Act in the Republic of Bulgaria

(RNCPHAIASDARB), and includes all required documents. To participate in the competition for the appointment to the academic position of "Associate Professor", the candidate Georgieva, PhD, MD, has submitted a total of 27 scientific papers, which are clearly distinguished from the scientific papers with which she was awarded with a PhD with a total IF of 3.014. According to indicator **C** (habilitation work in the form of scientific publications) (not less than 10) in journals that are referenced and indexed in the world-famous databases with scientific information) for fulfillment of the minimum national criteria, according to ASDARB, Georgieva has presented 10 publications with a total number of points of **277**, with a required minimum of 100 points. According to indicator **D** (other scientific publications, books and monographs), the candidate has presented 17 publications in unreferenced peer-review journals or in edited collective volumes with a total number of **228.5** points with a required minimum of 200 points. The fulfillment of the requirements under indicator **E** - citations and/or reviews is particularly impressive. The total number of points from the citations is **145**. According to this indicator, the points are **105** with a required minimum of 30.

Chief Assistant Professor Georgieva is the leader of 1 national research project, participant in 3 national research projects and 3 international projects. She has participated in 2 national programs and in 1 program of Sofia Municipality. There are no published textbooks or handbooks. There is significant publishing activity in the field in which he works.

From the above, it is clear that the minimum national requirements and the requirements of RNCPHAIASDARB, are repeatedly exceeded, which makes Georgieva's candidacy for the academic position of "Associate Professor" indisputable!

2. Assessment of the pedagogical expertise and activity of the candidate

From 2014 to 2019, Georgieva, PhD, MD, has been teaching as part of the Department of Microbiology in the course for postgraduate training in "Sanitary Microbiology", according to the program of NCIPD. Also from 2014 to 2020 the candidate has conducted specialized courses on the application of standard methods for determining the microbiological safety of drinking water, cosmetics, etc., validation and verification of microbiological methods for analysis of food, water and other environmental samples; acquaintance with current European standards for microbiological control of food, water and cosmetics. The rich teaching experience passed on to researchers and workers in the respective companies for the production of food, bottled natural and mineral waters, water pools and others is impressive. Georgieva is not only a lecturer, but also a supervisor at many of the conducted lecture courses.

3. Main contributions

The main directions of the scientific production of Chief Assistant Professor Georgieva, PhD, MD, are: 1. Conduction of microbiological analyzes of samples of tap water, drillings, surface water bodies, supplying settlements, bottled water, swimming pools; cosmetics; WWTP sludges, biowaste, soil improvers; air in working and living premises and 2. Conduction of hydrobiological analyzes of samples from surface water bodies, supplying settlements; water bodies used for recreation and fishing; bottled water; soft drinks. The research of the candidate is in these two main areas. Through them a comparative analysis of the obtained original research with the research of other authors can be made. Significant scientific and, above all, applied science contributions stand out.

Hygienic assessment of surface water bodies, water supply settlements, tap water, boreholes and bottled water - dams for water supply (Iskar Dam, Dyakovo Dam, Asenovets Dam, Bebresh Dam) was made.

Hygienic assessment of rivers (Iskar and Danube) was made in order to improve their ecological status and prevent their loading with anthropogenic pollutants.

It has been established that the water supply networks of the larger settlements meet the normative requirements. The water supply of small settlements is problematic, especially when they draw water from drilling wells.

It has been proven that Bulgarian bottled waters meet the requirements of European and national documents. The sources and routes of secondary contamination of these waters have been clarified. As a result, three monitoring schemes for bottling companies have been set up.

A PCR method for the identification of verotoxigenic *E. coli* was tested.

It was shown that WWTP sludge is a rich source of nutrients for soils and contributes to increasing agricultural yields. A methodology for treatment of sludge from treatment plants has been developed, allowing to achieve better microbiological indicators in a shorter period and to accelerate their use as soil improvers, an alternative to artificial fertilizers.

According to the same methodology, an assessment of children's sandstones and sand from regulated beaches on the Bulgarian Black Sea coast in order to protect public health was made.

The candidate proves that the Black Sea estuary of mud, which has a positive effect on the skin, is safe for use in cosmetics.

The phytoplactonic communities of surface water bodies, water supply settlements (Iskar, Dupnitsa dam, Studena dam, Bebresh dam) and reservoirs used for recreation and fishing (Bistritsa dam and "Apiary") inhabiting these reservoirs were characterized through their hydrobiological study. Two hydrobiological approaches for the study of surface water bodies have been developed and published.

Hydrobiological and microbiological methods in bottled waters and soft drinks have identified microalgae, molds and their hyphae, which have entered through the drinking water, by air or from any of their components. The microalgae in the mineral and spring waters are mainly from the group of green and blue-green algae, and in the table waters they are siliceous, green and euglenic algae and in most cases they are part of the flora of the water sources. The results obtained from the hydrobiological analyzes of drinking water, recreational water bodies, bottled water and soft drinks are without analogue in the system of the Ministry of Health.

A method for the determination of the presence and concentration of antibiotics in the air of the production environment has been developed.

4. Significance of the contributions to science and practice

The general scientific activity of Chief Assistant Professor Georgieva, PhD, MD, is characterized by: - topicality; - good methodological base of the research, characterized by the use, development and introduction of appropriate methods; - significance of the obtained results for the practice. The research work of the candidate has significant economic and social value.

5. Critical notes and recommendations

I have no critical remarks. I recommend that some of the research be summarized in monographs and brochures to help manufacturers of food, bottled water, cosmetics.

CONCLUSION

Chief Assistant Professor Vessela Ivanova Georgieva, PhD, MD, is a well-prepared and erudite researcher in her field. She participates in the present competition with scientific production, which characterizes her as a contemporary researcher with original scientific ideas and methodological preparation for their implementation. She makes significant mainly applied science contributions with her publications. With the presented materials the candidate fully covers and exceeds the minimum national requirements and RNCPHAIASDARB for occupying the academic position "Associate Professor". The results obtained from the author's research have become available to the scientific community through participation in congresses, conferences, seminars.

Based on my acquaintance with the presented scientific works, their significance, the scientific, applied science, applied and methodological contributions contained in them, I consider it reasonable to propose Chief Assistant Vessela Ivanova Georgieva, PhD, MD, to take the academic position of "Associate Professor" in the science field 7. Health and Sports, 7.1. "Medicine", "Hygiene".

17.05.2021
Plovdiv

Member of the scientific jury:.....
(Prof. Zapryana Rangelova Denkova, DSc)