OPINION

From Assoc. Prof. Teodor Panev, PhD

National Center for Public Health and Analysis, Sofia Member of the scientific jury according to order RD -164 / 05.04.2021, of the director of NCPHA

SofiaSubject: Competition for the academic position of "Associate Professor" in the field of higher education 7. Health and Sports"in professional field 7.1. Medicine in the Scientific Specialty "Hygiene" for the needs of the Department of Chemical Factors, Directorate "Analytical and Laboratory Activities" of NCPHP Sofia (SG No. 14 of February 19, 2021)

The only candidate in the competition is Vera Tsvetanova Pavlova, PhD

The opinion was prepared on the basis of the materials submitted in the competition. The documentation complies with the requirements, the Regulations for development of the academic staff of NCPHA, the Law for the development of the academic staff in the Republic of Bulgaria and the Regulations to it.

Biographical data

Vera Tsvetanova Pavlova, PhD Is a Senior assistant at the department "Chemical factors, directorate" Analytical and laboratory activities " of NCPHP Sofia since 2012. Vera Pavlova graduated from the Faculty of Chemistry, Sofia University, in Applied Chemistry in 1998. From 2000 to 2003 she was a Chemist at the National Center for Hygiene, Medical Ecology and Nutrition, majoring in Public Health, Life Sciences Wednesday ". From 2008 to 2011 she was a Chemist specialist in Laborex EAD at the Ministry of Health from 2011 to 2012 chief expert in the Chemical Factors Department, Analytical and Laboratory Activities Directorate of NCPHA. 2012 to 2017 is Senior Assistant in the Department of Chemical Factors, Directorate "Analytical and Laboratory Activities" of NCPHA. From 2017 until now is Ch. Assistant, Head of Chemical Factors Department, Analytical and Laboratory Activities Directorate of NCPHA. From 2003 to 2007 she was a full-time PhD student at National Center for Public Health in the scientific specialty 03.01.32 Hygiene; in 2013 acquired secod specialty "Sanitary Chemistry"

Evaluation of the submitted materials

Quantitative indicators

Senior Assistant Vera Pavlova, PhD applied for the current competition with a total of 35 publications, of which 6 with an impact factor. According to the attached references from NACID and the Central Medical Library, the total number of citations is 23 articles, 19 of which are in Scopus.

Chief Assistant Vera Pavlova PhD has participated and continues to work on 8 national and international research projects.

She is a member of four professional national and international societies and associations in the field of scientific interests and activities of the candidate.

Participates in the training of graduates, graduates, interns

The research interests and experience of the candidate are mainly related to the quality of drinking and mineral waters, as well as to the waters for recreation and water sports and in the field mainly of liquid (HPLC) and ionic (IC) chromatography. The candidate has three specializations abroad in the field of analysis and evaluation of cyanotoxins and microcysts.

The total number of points on indicators from A to E is 910.5 (Table N_2 1), with a minimum required number of points of 400, according to the NCPHA Regulations. The scientometric indicators of the candidate in the competition exceed twice the required number of points.

Таблицата №1 - Справка по Приложение 1 и 2. от Правилника на НЦОЗА с точки по критериите за доцент.

Група	Показател	Изисквания на Правилника на НЦОЗА	Постигнати от кандидата
Група А	Докторска дисертация	50	50
Група Б	Доктор на науките	-	<u>-</u>
Група В	Хабилитационен труд, под формата на научни публикации (не по-малко от 10) в издания, които са реферирани и индексирани в световноизвестни бази данни с научна информации;	100	105,5
Група Г	Публикации и доклади, публикувани в научни издания, реферирани и индексирани в световноизвестни бази данни с научна информация Публикации и доклади, публикувани в	200	60
	нереферирани списания с научно рецензиране или публикувани в редактирани колективни томове		175 Общо: 235
Група Д	Цитирания и/или рецензии в научни издания, реферирани и индексирани в световноизвестни бази данни с научна информация	50	285
	Цитирания в монографии и колективни томове с научно рецензиране		10
	Цитирания и/или рецензии в нереферирани списания с научно рецензиране		15

		Общо 310
Група Е	Придобита медицинска специалност -	40
	Участие в национален научен или образователен проект	6 x 15 = 90
	Участие в международен научен или образователен проект	1 x 20 = 20
	Ръководство на национален научен или образователен проект	30
	Обучение на стажанти, специализанти и докторанти (семинарни и практически занятия)	30
		Общо: 210

The scientific-teaching and activity of the chief assistant Vera Pavlova covers trainings from SDO and continuing training of specialists in the healthcare system and basic courses of specialists from SDO, specialty "Sanitary Chemistry", as well as training of specialists (supervisor of a specialist in "Sanitary Chemistry") and graduates.

The contributions of Ch. Assistant Professor Vera Pavlova can be summarized in several areas:

- 1. Ch. ace Vera Pavlova participated in the first studies in Bulgaria for the presence of toxins of blue-green algae (cyanotoxins) in 2006, which later became the subject of her dissertation. Hygienic and analytical aspects of the presence of microcystins in surface waters "(2003-2007), presents the first data from studies in Bulgaria on the presence of toxins of blue-green algae (cyanotoxins). The research continues in depth to this day, as this is a significant topic on which the NCPHP is working and which is important for public health. The importance of algae blooms and the toxins they produce is also reflected in the new European Directive 2020/2184 of 23.12.2020 on the quality of water intended for human consumption.
- 2. For the first time Bulgarian scientists participate in a project on this topic in the period 2012-2016 (COST action ES 1105 (Cyanobacterial blooms and toxins in water resources: Occurrence, impacts and Management), The problem is intensively studied in Europe and the world in recent years, a number of international projects have been implemented. Based on the data received from this COST action, as well as from other international research projects, a reference proposal to the European Commission for amendments to the Water Framework Directive is included, including indicators such as microcystins, as they pose a risk to humans, animals and the environment. it is already a fact.
- 3. Introduced method for the determination of microcystins in NCPHA is unique to the health care system, and as a chromatographic determination is probably the only one in the country.

4. In addition to the development of chromatographic methods, another contribution that can be made is the introduction of ELISA determination in aqueous samples not only of microcystins but also of other algal toxins, such as saxitoxins, cylindrospermopsin, toxoid.

5. The candidate also contributes to the introduction of analytical methods for determining the determination of physicochemical parameters relevant to the quality and safety of drinking water, namely anions by ion chromatography, such as chlorides, nitrates, nitrites, sulfates, phosphates and others. The first studies of Bulgarian waters for the presence of bromates were conducted. The analytical activity of Chief Assistant Pavlova is also associated with HPLC determination of organic contaminants in water, such as pesticides, polyaromatic hydrocarbons

Last but not least, the candidate is involved in the development of a number of analytical methods: for the determination of cyclic oligomers migrating from food contact materials as part of the commitments of the National Reference Laboratory for Food Contact Materials, including specialists from NCPHA, as well as the development of an HPLC method for the determination of pharmaceutical products such as diclofenac in an aqueous medium together with colleagues from UCTM.

In conclusion, based on the preliminary documents, I believe that Chief Assistant Vera Pvalova, MD has a significant scientific and professional contribution in the field of hygiene and sanitary chemistry and scientometric indicators fully meet and exceed the requirements of the PRAS of NCPHA, ZRASRB and the Regulations to it. I am convinced with a positive vote and I recommend to the respected scientific jury to award the scientific title "Associate Professor" to Chief Assistant. Vera Pavlova, MD, in the field of higher education 7. "Healthcare and sports" in professional field 7.1. "Medicine." the scientific specialty "Hygiene" for the needs of the department "Chemical factors", Directorate "Analytical and laboratory activities", NCPHA, Sofia.

15.05.2021

Assoc. Prof. Teodor Panev, Ph.D.