



STATEMENT

on the competition for the academic position „Associate Professor“ in the field of higher education 7. „Healthcare and sport“, professional direction 7.1 „Medicine“, scientific speciality „Hygiene“ for the needs of the National Center of Public Health and Analyses, Department “Chemical Factors”, Analytical and Laboratory Activities Directorate announced in the State Gazette, issue 14 / 19.02.2021, p. 213

by Dr. Ivanka Grigorova Dakova
Associate Professor at the Department of Analytical Chemistry,
Sofia University „St. Kliment Ohridski“, Faculty of Chemistry and Pharmacy,
a member of the Scientific Jury, appointed by order № RD 154 / 15.04.2021 of the Director of the
National Center of Public Health and Analyses.

The only candidate who applied and was admitted to the competition is Chief Assistant Professor Vera Tsvetanova Pavlova, PhD, who works in the Department “Chemical Factors”, Analytical and Laboratory Activities Directorate of the National Center of Public Health and Analyses.

Career development of the candidateл. Ch. Assist. Prof. Dr. Vera Pavlova completed her higher education as a master in 1998 at the Faculty of Chemistry of Sofia University „St. Kl. Ohridski“. In the periods 2000-2003 and 2008-2011 she worked as a chemist at the National Center for Hygiene, Medical Ecology and Nutrition and “Laborex EAD”. Since 2011 Dr. Pavlova has been working at the National Center of Public Health and Analyses, where she has successively held the positions of „Chief Expert“ (2001-2017) and „Chief Assistant Professor“ (2017–). Since 2017, she has been the Head of Department “Chemical Factors”, Analytical and Laboratory Activities Directorate.

In 2007 Vera Pavlova successfully defended her doctoral thesis on „Hygienic and analytical aspects of the presence of microcystins in surface waters“ and was awarded the PhD degree in scientific speciality 03.01.32 „Hygiene“. The candidate has completed three specializations at the Masaryk University in Brno, Czechia; Michigan State University, Institute of International Health, Michigan, USA; University of Turku, Finland.

Scientific and project activities. Ch. Assist. Prof. Dr. Vera Pavlova is a co-author of 25 scientific publications on the topics of the competition, published in the period 2005-2021, which are not included in her doctoral dissertation. All publications correspond to the declared scientific direction. Most of them (17 papers) are published in journals with impact factor (6 papers), SJR, GBIF or are referenced in Scopus and ISI Web of Science. Publications in journals with a high

impact factor, such as *Advances in Oceanography and Limnology* (IF 3.38), *Applied Sciences* (IF 2,842), *Marine and Freshwater Research* (IF 1,488), *Journal of Environmental protection and Ecology* (IF 0.692) prove the high quality of the scientific production of Dr. Vera Pavlova. At the time of submitting the documents for participation in the competition, 23 citations have been noticed.

The publications presented for participation in the competition are in the field of study of the quality of drinking and mineral water, and water for recreation and water sports. The analytical expertise of the candidate is mainly in the field of high performance liquid chromatography (HPLC) and ion chromatography(IC). The main contributions can be summarized in the following scientific areas:

- Investigation on algal toxins, especially their most toxic representatives - microcystins, in several Bulgarian water bodies (in the region of Sofia and Black Sea Coast) (papers №№ 1-4, 6-11, 13-15, 20, 21,23,24).

- Assessment of the significance of algal blooms and the toxins produced by them, which is included in the new European Directive 2020/2184 (23.12.2020) on the quality of water for human consumption. The carcinogenic hepatotoxin microcystin-LR is included as „chemical parameter“ with a maximum permissible value of 1 µg/L. The developed procedure for determination of microcystins in National Center of Public Health and Analyses is unique for the system of Ministry of Health.

- Development and introduction of procedures for determination of microcystins, saxitoxins, cylindrospermopsin, anatoxin-a in water samples by ELISA method.

- Development and introduction of procedures for determination of anions (chlorides, nitrates, nitrites, sulfates, phosphates, etc.) by ion chromatography. The presence of bromates in Bulgarian water for human consumption was assessed (paper № 5).

- Development and introduction of procedures for determination of organic contaminants (pesticides, polyaromatic hydrocarbons) by HPLC (papers №№ 12, 16, 17 and 22) .

- Development of analytical procedures and participation in tests for determination of cyclic oligomers migrating from food contact materials.

- Development of procedure for diclofenac determination in water samples by HPLC.

The scientific results are presented in a total of 37 oral and poster presentations at national and international conferences.

The materials of the competition contain data on the participation of Ch. Assist. Prof. Dr. V. Pavlova in 8 research projects in the period 2010-2021. One of the projects is international (COST

action ES 1105 “Cyanobacterial blooms and toxins in water resources: Occurrence, impacts and Management”), and of one of them the candidate is a supervisor.

Teaching activity. Ch. Assist. Prof. Dr. V. Pavlova actively participates in the teaching work of the National Center of Public Health and Analyses. She has conducted seminars in field of water quality and sample preparation. She is a supervisor of one successfully defended graduate. Ch. Assist. Prof. Dr. V. Pavlova is the organizer of a seminar on "Modern aspects of public health and ecology" for PhD students and young scientists

Membership in scientific and professional organizations. The candidate is a member of the following organizations: European Public Health Association; Union of Chemists in Bulgaria; Bulgarian Public Health Association; Bulgarian Toxicological Society.

Compliance with the national minimum requirements for academic staff development:

Group A – 50 points – fulfilled

Group B – 105,5 points – fulfilled

Group G – 235 points – fulfilled

Group D – 310 points – fulfilled

Group E – 210 points – fulfilled

Conclusion

Based on the analysis of the overall research, teaching and professional activities of Chief Assistant Professor Dr. Vera Tsvetanova Pavlova, I believe that she fully meets the requirements for holding the academic position of „Associate Professor“ under the Law on the Development of Academic Staff in the Republic of Bulgaria, the Regulations for the implementation of this law. As a member of the Scientific Jury of the announced competition, I give a positive assessment and recommend that the members of the Honorable Scientific Council of the National Center of Public Health and Analyses vote positively for the election of Chief Assistant Professor Dr. Dr Vera Tsvetanova Pavlova in the academic position „Associate Professor” in the field of higher education 7. „Healthcare and sport”, professional direction 7.1 „Medicine“, scientific speciality „Hygiene“.

14.06.2021

Assoc. Prof. Ivanka Dakova, PhD

