## STATEMENT

by

Professor Veselina Georgieva Gadjeva, Faculty of Medicine, Thracian University, Stara Zagora

Appointed as a member of the Scientific Jury by order of the Rector of Medical University "Prof. Dr. Paraskev Stoyanov "- Varna, № P-109-168/14.04.2022

regarding a competition for holding an academic position of associate professor in the field of higher education 4. Natural Sciences, Mathematics and Informatics, professional field 4.2. Chemical Sciences, specialty "Chemistry" at the Faculty of Pharmacy, Department of Chemistry, according to an announcement at the State Gazette, issue 14/ 18.02.2022.

The order of the procedure fully meets the requirements of Law of the Development of the Academic Staff in Republic of Bulgaria and the Regulation for the Development of the Academic Staff at Medical University - Varna. The only candidate participating in this competition is chief assistant professor Katya Peycheva Ivanova, Ph.D. I had received within the due date all the documents and materials for the competition and they are in accordance with the Regulation for the Development of the Academic Staff at Medical University - Varna

#### 1. Brief biographical and professional data of the applicant

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Chief Assistant Professor Katya Peycheva Ivanova, Ph.D. was born on July 20, 1980 in the city of Varna. She had graduated from Sofia University "St. Kliment Ohridski", Faculty of Chemistry and Pharmacy in 2005 with a bachelor degree of Analytical Chemistry and had defended her master thesis of Modern Spectral and Chromatographic Methods of Analysis in 2007. Additionally, she gained a master degree in major Teacher of Chemistry at the same university. During 2015-2017, she had been a full-time Ph. student at the Department of Chemistry, MU-Varna. After successfully defending his dissertation on the topic: "Determination of toxic elements in the marine system water-biota-sediment ", she had obtained a doctoral degree in the field of "Bioorganic Chemistry, Chemistry of Natural and Physiologically Active Substances". She has taken consistently the academic position of Assistant Professor and Chief Assistant Professor at the Department of Chemistry, Faculty of Pharmacy, MU-Varna since 08.08.2008. She had improved her academic qualification with various post graduating expertise, courses, seminars and training for the period between 2007 and 2019 such as specialization in Theoretical Principles of Medicinal Chemistry (2016- 2019); internship at Prof. Michail Baklanov's research group at IMEC, Leuven, Belgium (01.02.2007- 01.08.2007); an ERASMUS student at Prof. Hao Zhang's research group at the Lancaster Environmental Center, Lancaster, UK (01.05.2016-01.07.2016).

## 2. Evaluation of the results of scientific research activities of applicant

The scientific research area of Chief Asst. Prof. Katya Peycheva Ivanova, Ph.D. is focused on food quality and their potential effects on human health. The main topic in her research is related to the characterization of Black Sea marine and freshwater organisms in terms of toxic pollutants and nutritional parameters. The research emphasizes on marine fish species and molluscs as indicator organisms and must be view at the point of Black Sea pollution degree. In this aspect, the systematic researches are of significant national and regional interest and they fit within the objectives stated by the Marine Strategy of the Republic of Bulgaria (2022-2027) for environmental protection of marine waters and the Multiannual National Strategic Plan for Aquaculture in Bulgaria (2014-2020). All these facts evidence the relevance of the scientific researches and gives me a reason to consider them significant.

Chief Asst. Prof. Katya Ivanova has logically grouped her research scientific contributions into the following three areas: 1.) Safety of Black Sea marine and freshwater fish species and molluscs; 2.) Composition and biological / functional activity of marine and freshwater organisms and molluscs; 3.) Assessment of the risk / benefit ratio for the consumption of Black Sea molluscs. The results from these research studies in the relevant areas have been published in peer-reviewed (refereed) journals. The applicant participates in the current position for an associate professor with a total of 1 monograph and 24 publications (12 of which are in a journal with IF (indexed in Scopus and / or Web of Science)). The applicant has publications in scientific journals with a total IF of **20.585**. According to the applicant's publication, she is a first author in 11 of them, second or corresponding author in 14 of them, which show her ability to set the scientific aims, present and publishes the outcome results. There are 33 citations (excluding the self-citations) of the applicant's papers according to Web of Science and Scopus databases presented in the current procedure. The candidate has an h-index 3 according to SCOPUS.

While performing her research studies, Chief Asst. Prof. Katya Peycheva Ivanova has acquire a lot of theoretical knowledge in the field of chemistry and biochemistry and has performed an enormous amount of filed work, using up-to-date analytical methods for research. I highly appreciate her research based on the quality of various Black Sea fish species and mussels based on fatty acid profile, PUFA / SFA and omega-6 / omega 3 ratios and lipid indices (such as atherogenic, thrombogenic and cholesterolic). Based on those results, it may be concluded that the analyzed Black Sea organisms are good sources of polyunsaturated fatty acids and vitamins, which defines them as a food source of very good quality with certain specific health benefits. The total concentration of toxic and essential elements and the total lipid amounts found during the studies were used to quantification the benefit–risk ratio of the nutritive value of the samples. Further the risk-benefit ratio of the consumption of these seafood and freshwater products were assessed, which is a pilot for our country.

## 3. Assessment of the applicant teaching activities

Chief Asst. Prof. Katya Peycheva Ivanova, Ph.D. is a well-established and authoritative university lecturer. She had actively and effectively participated in the educational activities of the

Department of Chemistry, as well as in the educational agenda of MU-Varna through doing lab exercises and seminars, lectures, session exams and etc. as an assistant professor and chief assistant professor. The applicants had performed totally of 552 hours of work for the previous academic year (2020/2021) based on the appendix "Information on the Annual Workload 2020/2021". She has exercises in: "Medicinal Chemistry" for students from major of Medicine (Bulgarian and English language program) and major of Dental Medicine (English language program); "General and Inorganic Chemistry" and "Physical Chemistry with Colloid Chemistry" of students major in Pharmacy; elective discipline of "Environment and Health" for students major in Pharmacy (Bulgarian language program). The applicant lectures course of "Physical Chemistry with Colloid Chemistry" and elective discipline "Chemistry and Environment" for students majoring in Pharmacy (Bulgarian language program). Further, it is also noticeable that the applicant takes part in the development of curricula in General and Inorganic Chemistry for students majoring in Pharmacy (Bulgarian language program) and Chemistry for the student majoring "Dental Medicine" (English language program).

# 4. Assessment of the minimum national scientometric indicators for holding the academic position 'Associate Professor'

For the participation in the competition Chief Asst. Prof. Katya Peycheva Ivanova, Ph.D presents the following publications and citations:

Indicator A1. Dissertation work for earning an educational and scientific doctor degree (50 points).

Indicator B3. Monography: Peycheva, K. Toxic and essential elements in the Black Sea fish. Assessment of the potential health risk for the consumer, 2021, 133 pages, Varna, MU-Varna, ISBN 978-619-221-356-5 (100 points).

**Indicator D7**. There are 12 publications published in scientific journals, referenced and indexed in world databases of scientific information (Web of Science and Scopus) presented by the applicant: 2 publications with Q1, 4 publications with Q2, 1 publication with Q3 and 5 publications with Q4. Total number of points from indicators D (5-10) - **205 points**, with a mandatory minimum of 200 points.

**Indicator E11**. There are 33 citations (excluding the self-citations) of the applicant's papers according to Web of Science and Scopus databases presented in the current procedure, which carry **66 points** out of 50 points.

The total number of points is 421 (at minimum 400 points according to the Regulation for the Development of the Academic Staff at Medical University – Varna).

#### CONCLUSION

After analyzing the materials and scientific contributions, which were submitted for participation in the competition, I find out that Ch. Asst. Prof. Katya Peycheva Ivanova, Ph.D. has

a sufficient amount of scientific and teaching activities. The attached publications and citations' evidences fully comply with and exceed the minimum requirements for holding the academic position 'Associate Professor' in Professional Field 4.2. Chemical Sciences, specialty "Chemistry" at the Faculty of Pharmacy, Department of Chemistry. The above gives me the reason to vote positive and to recommend to the Scientific Jury to award Chief Assistant Professor Katya Peycheva Ivanova, PhD an academic position of 'Associate Professor'

29.05.2022

Prepared the statement: //Prof. Veselina Georgieva Gadzheva, D.Sci/