

## OPINION

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Regarding: Competition for taking up the academic position "Associate Professor", field of higher education 4. Natural sciences, mathematics and informatics; professional field 4.2 Chemical Sciences; Specialty "Chemistry", for the needs of the Department of Chemistry, Faculty of Pharmacy, Medical University "Prof. Dr. Paraskev Stoyanov" - Varna, promulgated in SG, no. 14/18.02.2022

### Information about the procedure

I present this standpoint as a member of the academic panel, according to the Order of the Rector of the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna (№ P-109-168/ 14.04.2022) and decision of the academic panel from 27.04.2022.

The candidate in this competition is Ch. Assistant Katya Peycheva Ivanova, PhD, Department of Chemistry, Faculty of Pharmacy, Medical University "Prof. Dr. Paraskev Stoyanov" - Varna.

### Brief information about the candidate

Ch. Assist. Katya Peycheva was born in 1980 in the city of Varna. In 2005 she acquired a bachelor's degree in Analytical Chemistry, and in 2007 a Master's degree in "Modern Spectral and Chromatographic Methods of Analysis" at Sofia University "St. Kliment Ohridski".

After defending her dissertation on "Determination of the content of toxic chemical elements in the water-biota-sediment system" in 2017, K. Peycheva acquired the educational-scientific degree "Doctor" in the scientific specialty "Bioorganic chemistry, Chemistry of natural and physiologically active substances".

In 2019 she completed her specialization in "Theoretical Foundations of Medicinal Chemistry".

Ch. Assistant Peycheva has over 13 years of academic experience. She was appointed as an Assistant in 2008, and as a Chief Assistant in the Department of Chemistry at the Faculty of Pharmacy of the Medical University – Varna in 2018, where she has been working since then.

### Teaching activities

The teaching experience of Ch. Assistant K. Peycheva includes conducting practical exercises and seminars in the subjects: Chemistry (Bulgarian and English language training) for specialty Medicine; Chemistry (English language training) for specialty Dental Medicine; General and inorganic chemistry for specialty Pharmacy; Physical Chemistry with Colloid Chemistry for specialty Pharmacy; Chemistry and Environment - specialty Dental Medicine; Chemistry and Environment (elective) - specialty Pharmacy.

In addition, Ch. Assist. Peycheva has prepared and conducted some lectures in the disciplines: Physical Chemistry with Colloid Chemistry - Specialty Pharmacy; Chemistry and Environment

(elective) for the specialties Dentistry and Pharmacy; Preparatory course in Chemistry for English language teaching.

The total teaching work-load of the candidate for the academic years 2016/2017, 2019/2020 and 2020/2021 is 1227 hours.

As can be seen from the presented documentation, she participated in the development of 4 curricula in: General and Inorganic chemistry for students in Pharmacy; Chemistry and Environment (elective) for students in Medicine, Dentistry and Pharmacy. Special attention deserves the participation of the candidate in the preparation of 10 textbooks and teaching materials.

Ch. Assistant K. Peycheva is a mentor to students-demonstrators at the Department of Chemistry and academic coordinator of the first year students in specialty Medicine, which shows her professional attitude to teaching.

### **Scientific research activity**

The total number of scholarly works of Chief Assistant Katya Peycheva includes: abstract of a dissertation; monographic work; 31 scientific publications and 39 participations in scientific forums.

In this competition, the candidate K. Peycheva participates with a monograph; 12 scholarly publications in journals with SJR and/or IF; 14 scholarly publications referenced in the Web of Science and 7 articles published in non-referenced scholarly peer-reviewed journals or conference proceedings without IF and SJR (non-indexed).

Katya Peycheva is the first author of 11 of the submitted publications for participation in the competition, and in 14 of them she is the second or third author. The total IF of the journals in which the candidate has publications is 20.585.

Scholarly works of K. Peycheva are cited 119 times according to SCOPUS and 256 times according to Google Scholar. The *h*-index of K. Peycheva is 3 according to Scopus and 7 according to Google Scholar.

The scientific contribution of Ch. Assist. Katya Peycheva is mainly related to the characterization of Black Sea organisms in terms of content of toxic pollutants and nutritional parameters, and they can be grouped thematically in the following areas:

#### 1. Safety of Black Sea and freshwater fish and molluscs.

The total content of toxic and essential elements in Black Sea fish, molluscs and freshwater fish has been determined; the total content of toxic and essential elements in Black Sea water and sediments has been characterized. It has been established that there is no risk to human health after the consumption of Black Sea fish, molluscs and freshwater fish.

#### 2. Composition and biological/functional activity of marine and freshwater organisms and molluscs.

The lipid composition and the content of vitamins in Black Sea and freshwater fish and molluscs, as well as the influence of the season and thermal stress on the lipid composition of marine molluscs were studied. Preliminary studies have been carried out on the content of phenolic compounds and the biological activity of extracts of molluscs, finding that the Mediterranean black mussels (*M. galloprovincialis*) from the Black Sea can be a good source of phenolic compounds.

#### 3. Assessment of the risk-benefit ratio in the consumption of Black Sea molluscs.

The results obtained on the content of toxic and essential elements and the parameters characterizing the quality of lipids were used to assess the risk-benefit ratio in the consumption of

these seafood and freshwater products. Such an assessment of the Black Sea and freshwater fish and molluscs is made for the first time in our country.

The presented monograph entitled "Toxic and essential elements in the Black Sea fish. Assessment of the potential health risk for the consumer" corresponds to the profile of this competition and contributes to the topics related to the assessment of the safety of Black Sea fish.

As an additional scholarly activity of Ch. Assistant Katya Peycheva should be noted her joint scientific work with students in Medicine and Pharmacy, as well as her participation in eight big research projects funded by the Bulgarian Ministry of Education and Science and the European Union.

### **Compliance with minimum national requirements for the academic position "Associate Professor"**

The information about the fulfilment of the minimum national requirements for the academic position "Associate Professor" in Professional Area 4.2 is shown in the following table:

Indicator	Content	Minimum national requirements	Dr. Katya Peycheva
A1: Dissertation for the award of educational and scientific degree "Doctor"	"Determination of the content of toxic chemical elements in the system water-biota-sediments", 2017, MU-Varna	50 points	50 points
B3: Habilitation work - monograph	"Toxic and essential elements in the Black Sea fish. Assessment of the potential health risk for the consumer ", 2021, ISBN 978-619-221-356-5	100 points	100 points
Г7: Scientific publications in journals, referenced and indexed in world-famous databases of scientific information (Web of Science and Scopus), not included in the habilitation work	12 articles, of which: 2 papers with Q1 4 papers with Q2 1 paper with Q3 5 papers with Q4	200 points	205 points
Д11: Citations in scientific journals, monographs and collective volumes and patents, referenced and indexed in world-renowned databases of scientific information (Web of Science and Scopus)	33 citations	50 points	66 points

The comparison between the minimum national requirements and those achieved by Ch. Assistant Katya Peycheva shows that the presented scholarly production covers and in some respects exceeds the requirements for the academic position of "Associate Professor".

## CONCLUSION

The review and analysis of the presented by Ch. Assist. Katya Peycheva Ivanova, PhD documents and materials on the announced competition show that they meet all requirements for taking up the academic position of "Associate Professor" at MU-Varna. Based on the above, I give my positive evaluation and propose to the members of the academic panel to award Ch. Assistant Katya Ivanova the academic position "Associate Professor" in professional field 4.2, specialty "Chemistry".

20.05.2022



Prof. Angelina Stoyanova, PhD