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-109-161/14.04.2022) and decision of the academic panel from 27.04.2022.

The candidate in this competition is Chief Assistant Veselina Zdravkova Panaytotova, PhD, Department of Chemistry, Faculty of Pharmacy, Medical University "Prof. Dr. Paraskev Stoyanov"- Varna.

Brief information about the candidate

Ch. Assist. Veselina Panayotova was born in 1984 in the city of Varna. In 2007 she obtained a bachelor's degree in Chemistry, and in 2009 Master's degree in "Modern Spectral and Chromatographic Methods of Analysis" at Sofia University "St. Kliment Ohridski".

Ch. Assist. V. Panayotova defended her dissertation in 2015 on "Determination of biologically active substances in Black Sea algae" for obtaining the educational and scientific degree "Doctor" in the scientific specialty: "Bioorganic chemistry, Chemistry of natural and physiologically active substances." Since 2019 she has specialty in "Theoretical Foundations of Medicinal Chemistry".

Veselina Panayotova has over 9 years of academic experience. Since 2012 she has been appointed as an assistant and since 2016 a chief assistant in the Department of Chemistry at the Faculty of Pharmacy of the Medical University - Varna.

Teaching activities

Veselina Panayotova conducts exercises and seminars with students from different specialties: "Chemistry" for specialty Medicine (in Bulgarian language); "Chemistry" for specialty Medicine (English language training); "Chemistry" for specialty Dental Medicine (Bulgarian language training); "Chemistry" for specialty Dental Medicine (English language training); "Inorganic and Organic Chemistry" for specialty Medical laboratory assistant;

"Analytical Chemistry" for specialty Medical laboratory assistant; "Physical chemistry with Colloid chemistry" for specialty Pharmacy; "Environment and Health" (elective) for specialty Pharmacy.

Ch. Assist. V. Panayotova has prepared and conducted lectures in "Physical Chemistry with Colloid Chemistry" for specialty Pharmacy; "Environment and Health" (elective) for specialty Pharmacy.

According to the presented by the candidate information, she was involved in the development of three curricula: "Chemistry" for specialty Medicine (English language training); "Chemistry" for specialty Dental Medicine (English language training); "Environment and Health" (elective) for specialty Pharmacy.

With a norm of annual work-load of 360 hours, she has realized for the last five years an average of 442 hours per year.

She is a co-author of 7 textbooks and one chapter of a book.

Scientific research activity

In the current competition Ch. Assist. V. Panayotova presents scholarly production, which includes 31 scientific publications, of which: one habilitation work — monograph; 15 scholarly publications in journals with SJR and/or IF; 4 scholarly publications referenced in the Web of Science (without SJR) and 11 articles published in non-referenced peer-reviewed journals or conference proceedings without IF and SJR (non-indexed).

Veselina Panayotova is the first author of 11 of the publications submitted for participation in the competition, with a major contribution (according to the candidate) in conducting experiments, processing the results, their analysis and writing articles. In 12 of articles she is a corresponding author, with contribution to the ideology, methodology and analysis of the results. The total IF of the journals in which V. Panayotova has publications is 20.974.

The total number of citations indicated by the candidate is 120 - a list of 27 citations is presented for the current competition. The *h*-index of Ch. Assist. V. Panayotova, according to Scopus, is 4.

The presented scholarly works concern the characterization of the quality and safety of marine and freshwater organisms. The scientific contributions from the presented publications can be grouped thematically in the following areas:

• Composition and biological/functional activity of marine and freshwater organisms. The content of lipids, fat-soluble vitamins, carotenoids and fatty acid profile of 7 kinds of Black Sea algae, 4 kinds of molluscs and 3 species of freshwater aquaculture was studied. Detailed knowledge of the lipid composition of these organisms provides valuable practical information on their use as healthy foods or nutritional supplements.

The presented data on antioxidant and antibacterial activity of extracts of Black Sea algae and molluses provide information on the presence of specific biologically active compounds that can be identified and isolated from the extracts and find applications in the development of medicinal products of marine origin.

· Safety of marine and freshwater organisms

The content of macronutrients, toxic and essential elements in 6 kinds of Black Sea fish, 4 species of freshwater aquaculture, 4 kinds of molluscs and 5 species of Black Sea algae was studied. To assess the safety of fish and molluscs as food, daily/weekly intake, target hazard quotient (THQ), hazard index (HI) and carcinogenic risk factor (TR) were calculated.

Assessment of the risk-benefit ratio for the consumption of Black Sea molluscs

The value of the calculated HQ_{EFA} indices (hazard factor) is less than 1 for each of the studied elements, which shows that the benefits of consuming Black Sea molluscs in terms of EPA and DHA content significantly outweigh the risks associated with the intake of toxic and essential elements.

The presented monograph "Marine phospholipids - sources of long-chain polyunsaturated fatty acids" provides valuable up-to-date information on "marine" polar lipids containing omega-3 polyunsaturated fatty acids.

In addition, V. Panayotova has participated in five research projects funded by the MU-Varna and one project co-funded by the EU.

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

According to the information submitted by the candidate Ch. Assist. Veselina Panayotova, her scientific output covers and in some respects exceeds the minimum national requirements for the academic position "Associate Professor".

- ➤ Indicator A1: Dissertation for the award of educational and scientific degree "Doctor" "Determination of biologically active substances in the Black Sea algae" Varna, 2015, Medical University Varna 50 points
- ➤ Indicator B3: Habilitation work monograph
 "Marine phospholipids sources of long-chain polyunsaturated fatty acids" Varna, 2021,
 Medical University Varna, ISBN 978-619-221-355-8 100 points
 - > Indicator Γ7: 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

15 articles, of which:

3 papers with Q2

2 papers with Q3

10 papers with Q4

The total number of points on indicators Γ is 205 with a minimum requirement of 200 points.

- > Indicator 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)
- 27 citations 54 points, with a minimum requirement of 50 points.

CONCLUSION

My overall assessment of the scholarly output and teaching experience of Ch. Assist. Veselina Panayotova is positive.

The materials presented by the candidate in the competition show that Ch. Assist. Veselina Panayotova meets all the requirements for holding the academic position of "Associate Professor". Therefore, I confidently propose to the members of the academic panel to award the academic position of "Associate Professor" in professional field 4.2, specialty "Chemistry", to Ch. Assist. Veselina Zdravkova Panayotova, PhD.

20.05.2022

Prof. Angelina Stoyanova, PhI