

OPINION

by a member of the scientific jury: Albena Georgieva Jordanova, Professor of Biochemistry, Professional field: 4.3. Biological Sciences, Faculty of Medicine, Sofia University "St. Kliment Ohridski"

on the materials for participation in a competition for the occupation of an academic position "Associate Professor" in the field of higher education: 4. Natural sciences, mathematics and informatics, Professional direction: 4.3. Biological sciences, Scientific specialty: Biochemistry, for the needs of the Department of Biochemistry, molecular medicine and nutrigenomics, Faculty of Pharmacy, Medical University "Prof. Dr. Paraskev Stoyanov" - Varna, announced in the State Gazette (No. 7, 01/23/2024)

One applicant, **Chief Assistant Professor Deyana Georgieva Vankova**, PhD, presented documents for participation in the announced competition

1. Conformity of the applicant's submitted documents, according to the Rules for occupying academic positions of Medical University "Prof. Dr. Paraskev Stoyanov" – Varna

The submitted documents from Chief Assistant Professor Deyana Georgieva Vankova, PhD, in the announced competition for the academic position "***Associate Professor***" fully meets the requirements of the Law on the Development of the Academic Staff in Bulgaria, the Regulations for its application, and the Regulations for the occupancy of academic positions at the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna.

2. Brief biographical data of the applicant

From the presented CV of Chief Assistant Professor Deyana Georgieva Vankova can be seen that in 2002 she obtained a bachelor's degree in the specialty "Molecular Biology" and professional qualification Molecular Biologist at the Faculty of Biology of Sofia University "St. Kliment Ohridski". In 2004, she completed successfully the master's program in the specialty "Molecular Biology" and received the professional qualification "Master - Molecular Biologist in Animal and Human Physiology", Sofia University "St. Kliment Ohridski". The professional development of the candidate in the competition for Associate Professor began as a medical representative at TchaikaPharma (2004), and in 2009 she began her academic development as an Assistant at the University of Varna, Faculty of Pharmacy, Department of Biochemistry, molecular medicine and nutrigenomics. She successfully defended her PhD thesis on the topic "*Study of the role of genetic factors and lifestyle in the appearance of obesity and metabolic syndrome in a sample of the Bulgarian population*" with supervisor Prof. Diana Ivanova, PhD in 2015 and obtained the educational and scientific PhD degree. From 2016 until now, Deyana Vankova is the Chief Assistant at the Department of

Biochemistry, molecular medicine and nutrigenomics, Faculty of Pharmacy, Medical University-Varna. In addition, she also has a recognized specialty in "Biochemistry" after a successfully completed specialization in the health care system and thus meets the requirements, according to the Regulations for the development of the academic staff of MU-Varna.

From the attached assurance, it can be seen that at the present time Chief Assistant Professor Deyana Vankova has over 15 years of teaching experience as an Assistant and Chief Assistant in her specialty at the Department of Biochemistry, molecular medicine and nutrigenomics, Faculty of Pharmacy, MU - Varna.

3. Evaluation of the candidate's scientific, applied scientific and publication activities

The scientific research activity of Chief Assistant Professor Deyana Vankova was carried out entirely in the Department of Biochemistry, molecular medicine and nutrigenomics, Faculty of Pharmacy, Medical University "Prof. Dr. Paraskev Stoyanov" - Varna. The scientific publications of D. Vankova, with which she participated in the current competition, are focused on the following two main thematic topics:

- Study of biomarkers in socially significant diseases;
- *In vitro* and *in vivo* studies of antioxidant and anti-inflammatory properties of medicinal plants and biologically active substances in cell cultures, experimental animals and humans.

Chief Assistant Professor Deyana Vankova has acquired scientific knowledge and skills for working with cell cultures, experimental animals and patients. She gained experience in determination of the biochemical changes in the transcriptional levels of highly informative molecular and molecular genetic markers, elucidating and analyzing the molecular mechanisms in experimental models of mouse pre-adipocyte and macrophage cell cultures, optimizing methods for RNA isolation from biopsy tissues and peripheral mononuclear cells, as well as application of *in vitro* and *in vivo* methods for the analysis of medicinal plants and biologically active substances.

In the current competition Chief Assistant Professor Deyana Vankova has presented sufficient scientometric indicators to meet the minimum national requirements for an academic position "Associate Professor" in the field of higher education: 4. Natural sciences, mathematics and informatics. The minimum requirements of the National Center for Information and Documentation and of the Regulations for occupying the academic position "Associate Professor" at the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna by groups of indicators in professional direction: 4.3. Biological Sciences are described in the

table below. For comparison, the indicators of Chief Assistant Professor Deyana Georgieva Vankova for her participation in the current competition.

Indicator group	Content	Minimum number of points for "Associate professor"	Minimum number of points for "Associate professor" in MU-Varna	Points of Chief Assistant Professor Deyana Vankova
A	Indicator 1	50	50	50
B	Sum of indicators 3 or 4	100	100	100
Г	Sum of indicators 5-10	200	200	255
Д	Sum of points in indicator11	50	50	54
TOTAL NUMBER OF POINTS BY ALL INDICATORS		400	400	459

According to **indicator A1** *PhD thesis for the award of the educational and scientific PhD degree*, a diploma for obtaining the educational and scientific PhD degree is presented for her dissertation work on the topic *"Investigation of the role of genetic factors and lifestyle in the appearance of obesity and metabolic syndrome in a sample of the Bulgarian population"*, Scientific specialty: Biochemistry. The dissertation was successfully defended in 2015 and, according to the national requirements for the current competition, gives the necessary **50 points** for this indicator.

To cover the requirements for the other indicators, the following evidentiary materials are presented: for **indicator B3** (*Habilitation thesis - monograph*), a monograph with the title: *Role of some adipokines in the pathogenesis of socially significant diseases* (2024) is presented. **14 scientific publications** with her participation, in only one of which she is the first author, have been published in refereed and indexed editions in world-famous databases with scientific information (*Web of Science, Scopus*) (**indicator Г7**). The requirement *"that the candidate has at least 8 articles in journals with an impact factor, which, at his discretion, he can distribute between criteria B4 and Г7"* is met. The distribution of journal publications with quartiles is as follows: 1 publication in journal Q1, 4 publications each – in journals with Q2 and Q3, and 5 scientific articles in journals with Q4. The total number of points for **indicator Г7 is 225 points**. In addition, under indicator Г8 - published book chapter or collective monograph, two scientific publications are included: *Mechanisms of cyanotoxin toxicity - carcinogenicity, anticancer potential, and clinical toxicology* (2029) and *Extrahepatic GLA-proteins - potential biomarkers for vascular calcification* (2021), each of them carrying 15 points. Thus, the total sum of the points for the indicators in **group Г of the candidate (Г7 + Г8) is 255 points** with a required minimum of 200 points, according to the requirements for occupying the academic position "Associate Professor".

The candidate in the competition has presented evidence of 27 citations to meet the requirements of **indicator Д** - *Citations in scientific publications, monographs, collective volumes and patents, referenced and indexed in world-renowned databases of scientific information (Web of Science and Scopus)*. The total number of points for this indicator is 27 citations x 2 points = **54 points**, with requirements of the law of minimum 50 points. **Thus, the sum of all points, according to the relevant indicators, is 459 with requirements of the law of minimum 400 points.**

The citation index of D. Vankova (h-index google scholar) is 7: https://scholar.google.bg/citations?hl=bg&user=oxoyO7kAAAAJ&view_op=list_works&sort_by=pubdate Apart from the minimum scientometric requirements, 4 practical books in Biochemistry for Dental Medicine and Pharmacy students (in Bulgarian and English), participation in 9 scientific conferences abroad and 13 scientific forums in Bulgaria, as well as participation in 10 scientific projects, as well as one of them is internationally funded, and 4 are funded by the Scientific Research Fund, Ministry of Education and Science.

4. Evaluation of the candidate's personal contribution

After I reviewed the documents of Chief Assistant Professor Deyana Georgieva Vankova in the announced competition for "Associate Professor" in the in the field of higher education: 4. Natural sciences, mathematics and informatics, professional direction: 4.3. Biological sciences, Scientific specialty: Biochemistry, for the needs of the Department of Biochemistry, molecular medicine and nutrigenomics, Medical University-Varna, I categorically summarize that the obtained results, the presented monograph, the 14 scientific publications, referenced and indexed in world-famous databases of scientific information, the two book chapters, the formulated scientific contributions, the participation in National and International scientific conferences, as well as the participation in numerous scientific projects were carried out with her active participation and are her personal credit.

In conclusion, Chief Assistant Professor Deyana Vankova meets the minimum national requirements in 4.3. professional field and no plagiarism was found in the scientific publications with which she participated in the competition.

5. Conclusion

After careful consideration and analysis of the submitted documents for participation in the announced competition for the occupation of an academic position "Associate Professor" in the field of higher education: 4. Natural sciences, mathematics and informatics, Professional direction: 4.3. Biological sciences, Scientific specialty: Biochemistry, for the needs of the Department of Biochemistry, molecular medicine and nutrigenomics, Faculty of Pharmacy, Medical University "Prof. Dr. Paraskev Stoyanov" - Varna, announced in the State Gazette (No. 7, 01/23/2024), I confidently declare that the candidate Deyana Georgieva Vankova,

PhD meets the minimum national requirements for National Center for Information and Documentation and complies with the terms and conditions defined by the Law on the Development of the Academic Staff in Bulgaria, the Regulations for its application and the Regulations for occupying academic positions at the Medical University-Varna.

I DEFINITELY SUGGEST Chief Assistant Professor Deyana Georgieva Vankova, PhD, to occupy the academic position "*Associate Professor*" in the field of higher education: 4. Natural sciences, mathematics and informatics; Professional direction: 4.3. Biological Sciences; Scientific specialty: Biochemistry, for the needs of the Department of Biochemistry, molecular medicine and nutrigenomics, Faculty of Pharmacy, Medical University "Prof. Dr. Paraskev Stoyanov" - Varna.

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Author of the opinion:

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