

STATEMENT

from Assoc. Prof. Petya Marinova, PhD
Faculty of Chemistry, University of Plovdiv "Paisii Hilendarski",
member of a scientific jury assigned with order № RD-22-82/17.01.2025 г.
of the Rector of University of Plovdiv "Paisii Hilendarski"

REGARDING: competition for the academic position "Associate Professor",
Field of higher education 4. Natural sciences, mathematics and informatics,
Professional direction 4.2. Chemical Sciences (Analytical Chemistry),
published in the Governmental Gazette, no. 98 from 19.11.2024

Procedure materials

One candidate took part in the announced competition – Chief Assist. Prof. Deyana Lyubomirova Georgieva, PhD. The candidate has submitted all the necessary documents and their examination shows that they are in accordance with the requirements of the Law on the Development of the Academic Staff of the Republic of Bulgaria, the Rules for its Implementation (RILDASRB) and the Rules for the terms and conditions for the acquisition of scientific degrees and occupying academic positions at University of Plovdiv "Paisii Hilendarski"

Brief biographical details of the applicant

Deyana Lyubomirova Georgieva graduated from secondary education at the "Vasil Levski" School in Stara Zagora in 1988. In 1989 - Technical School of Biotechnology and Chemical Industry D. Mendeleev - Stara Zagora, in 1995 she graduated from the University of Plovdiv "P. Hilendarski", Faculty of Chemistry, Master's degree in "Chemistry Teacher, Physics Teacher". In 2015, she obtained her PhD degree in Analytical Chemistry, Faculty of Chemistry at the University of Plovdiv "Paisii Hilendarski" with a dissertation title: "Solid-phase extraction with magnetic nanoparticles in the analysis of trace elements by plasma spectrometry". During the period 1989-1991 she worked at the Nedelcho Nikolov Plant, Stara Zagora, as an operator in the Lecithin Production workshop, where she performed activities related to Production Line Control. She was appointed as a chemist in the Department of Analytical and Computer Chemistry for the period 1994-2004, in 2004-2008 as an assistant in the same department, 2008-2010 - senior assistant, and from 2010 - until now - chief assistant.

Evaluation of the candidate's research activity

Evaluation of the quantitative indicators for the scientific activities

Chief Assistant Professor Dr. D. Georgieva is a co-author of 26 scientific publications and 1 chapter of a collective monograph. Of the publications, 16 are in journals, referenced and indexed in the world databases of scientific information (Web of Science and Scopus; 10 publications – Q1; 1 publication – Q2; 1 publication – Q3; 4 publications – Q4) and 10 of the publications are in journals without impact factor and impact rank.

In the competition for the academic position "Associate Professor", the candidate participated with 14 scientific publications and 1 chapter of a collective monograph. They are distributed as follows according to the indicators in the RILDASRB – 5 in indicator group B (a sum of 102 points was achieved), and the remaining 10 scientific works in indicator group D (a sum of 209 points was achieved). The majority of publications (9 in number) are in first

quartile (Q1) journals, which is indicative that the results are published in recognizable and established journals and is a testament to the quality of the research. In group B, the articles with Q1 are 3 in number, and with Q4 – one. Here we should also note the contribution of Dr. Georgieva in her participation in writing a chapter of a collective monograph. In group D, the publications that belong to the quartile Q1 are 6 in number, Q2 – one, Q3 – one, and with Q4 – 2. At the time of submission of the documents for participation in the competition, over 140 citations (refereed and indexed in Scopus and Web of Science) have been noted, the Hirsch index (h-index) is 7. The most cited article is in the journal *Analytica Chimica Acta*, 2004 (Q1) - 60 citations, followed by a publication in *Spectrochimica Acta Part B*, 2012 (Q1) - 32 citations and in *Biomedicines*, 2023 (Q1) - 17 citations. The scientific results have been presented in a total of 53 oral reports and poster presentations at national and international forums. She has participated in 9 research projects and national programs, one of which is international.

Evaluation of the scientific contributions

Based on the presented author's reference for the contributions, the presented habilitation thesis, as well as the articles in the competition, I believe that the scientific research of Dr. Georgieva is interdisciplinary and scientifically applied in nature. The scientific research work of Chief Assist. Dr. D. Georgieva can be summarized in the following two main areas:

1. Development and application of inductively coupled plasma mass spectrometry for the characterization of nanoscale materials (publications under indicator B – 5 in number).
2. Development and evaluation of sample preparation approaches and spectrochemical methods of analysis for the determination of essential and potentially toxic elements in environmental objects (publications under indicator D – 10 in number).

Evaluation of the teaching activity of the candidate

The main part of Chief Assist. Prof. Deyana Liubomirova Georgieva, PhD teaching activities covers conducting classes with Bachelor students in compulsory disciplines such as Analytical chemistry, Analytical chemistry with instrumental methods of analysis, Separation and concentration methods in chemical analysis. She is a supervisor of exercises in the disciplines for the Bachelor's degree: Analytical Chemistry Part I and Part II, Selection, Storage and Preparation of Samples for Analysis, Separation and Concentration Methods in Chemical Analysis, Analysis of Environmental Objects and for the Master's degree - Modern Trends in Sample Preparation, Modern Methods and Trends in Elemental Spectral Analysis, Mass Spectrometry with Inductively Coupled Plasma. According to the report, the number of classroom sessions held with students for the period 2019-2024 is impressive and many times exceeds the additional specific requirements of the Faculty of Chemistry - total: Bachelors - 2571 hours and Masters - 490 hours.

The candidate has also participated in conducting practice classes with students from the Master's programs of the Faculty of Chemistry at the University of Plovdiv. Under the supervision of Chief Assist. Prof. Deyana Liubomirova Georgieva, PhD, three student diploma theses have been defended and one PhD student. Chief Assist. Prof. Deyana Liubomirova Georgieva, PhD was the co-supervisor of L. I. Kaynarova, PhD student. Senior Asst. Prof. Dr. L. Kaynarova is a promising young scientist who shaped his scientific interests precisely thanks to Chief Assist. Prof. Dr. D. Georgieva, who passes on her many years of experience, wonderful wisdom and fantastic authority to the younger generation, inherited from Assoc. Prof. V. Stefanova, PhD.

Evaluation of the implementation of the minimum national requirements and the recommended requirements of the Faculty of Chemistry at the University of Plovdiv

The comparative analysis of the quantitative criteria achieved by Chief Assist. Prof. Deyana Liubomirova Georgieva, PhD in relation to the minimum national requirements for occupying the academic position "Associate Professor", as well as in relation to the recommended requirements of the Faculty of Chemistry at the University of Plovdiv, shows that the candidate fulfills the above mentioned requirements. It should be emphasized on the significant exceed of the quantitative indicators (points) achieved by Chief Assist. Prof. Deyana Liubomirova Georgieva, PhD regarding the indicator "Citations in scientific publications, monographs and collective volumes, referenced and indexed in world-recognizable databases with scientific information (Web of Science and Scopus)". This also applies to the additionally introduced by the Faculty of Chemistry at the University of Plovdiv group of recommended indicators for occupying the academic position "Associate Professor" in Professional Direction 4.2. Chemical Sciences.

Conclusion

The submitted materials for the competition meet the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria, the Rules for its Implementation, the Regulations of the University of Plovdiv, as well as the recommended requirements of the Faculty of Chemistry at the University of Plovdiv. The self-evaluation materials presented by Chief Assist. Prof. Deyana Liubomirova Georgieva, PhD give me the reason to conclude that she is an established researcher with significant activities whose academic position would contribute to the development of an important and interdisciplinary field.

Based on the above, I give a positive assessment and recommend to the respected Scientific Jury to propose the awarding of the academic position "Associate Professor" to Chief Assist. Prof. Deyana Liubomirova Georgieva, PhD, in Field of higher education 4. Natural Sciences, Mathematics and Informatics, Professional Direction 4.2. Chemical Sciences (Analytical Chemistry) for the needs of the Faculty of Chemistry at the University of Plovdiv "Paisii Hilendarski".

06.03.2025

Member of the Scientific Jury:

/ Assoc. Prof. Petya Marinova, PhD/