

STATEMENT

By Assoc. Prof. Stanislava Katelieva Georgieva, PhD

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Related to Competition for acquiring the Academic Position "Associate Professor"

in the field of higher education 4. Natural sciences, mathematics and informatics, professional field 4.2. Chemical Sciences and the scientific specialty Physical chemistry with colloidal chemistry

for the needs of the Department of Chemistry, Faculty of Pharmacy at the Medical University - Varna, announced in the State Gazette No. 6 / 16.01.2026.

1. Information about the competition procedure

By order of the Rector of the Medical University - Varna No. R-109-133/ 16.03.2026, I have been elected as a member of the Scientific Jury and have been assigned to prepare a statement (Protocol No. 1/27.03.2026) in connection with the procedure for occupying the academic position of "Associate Professor" in the field of higher education 4. Natural Sciences, Mathematics and Informatics, professional field 4.2. Chemical Sciences and specialty "Physical Chemistry with Colloidal Chemistry".

Documents corresponding to the requirements of the announced competition have been submitted by candidate Chief Assistant Professor Anelia Tsvetanova Gerasimova-Peneva, Ph.D. The submitted documents for participation are arranged, correctly described and are in accordance with the requirements of the Law for development of the academic staff in the Republic of Bulgaria, the Regulations for the Development of the Academic Staff of the Medical University - Varna for occupying the academic position "Associate Professor" and the conditions of the competition.

2. Education and career development of the candidate

Anelia Tsvetanova Gerasimova-Peneva, has started her professional development at the "Konstantin Preslavsky" University of Shumen in 2010 as a junior specialist (chemist), then from 2011 to 2012 as an assistant in the discipline "Analytical Chemistry" in the Department of Chemistry, Faculty of Natural Sciences. She joined the Medical University - Varna in 2012 as an assistant in "Physical Chemistry with Colloidal Chemistry" at the Department of Chemistry of the Faculty of Pharmacy. In 2017, she successfully defended her dissertation and obtained a doctorate in the specialty "Bioorganic Chemistry, Chemistry of Natural and Physiologically Active Substances", at the Department of Chemistry of the Medical University - Varna. From 2018 until now, she holds the academic position of Chief Assistant in Physical Chemistry with Colloidal Chemistry in the Department of Chemistry, Faculty of Pharmacy at the Medical University - Varna. Ch. Assist. Prof. Anelia Gerasimova-Peneva has acquired the specialty "Theoretical Foundations of Medicinal Chemistry" in the healthcare system since 2022.

3. Educational and teaching activities.

Ch. Assist. Prof. Anelia Gerasimova-Peneva has over 14 years of teaching experience, conducting lectures, seminars and laboratory exercises at MU - Varna in the subject "Physical Chemistry with Colloidal Chemistry" for students in "Pharmacy"; conducting exercises: in "Chemistry" for students in Medicine, Dental medicine; in "Inorganic and Organic Chemistry" and Analytical Chemistry for students in Medical Laboratory Assistant; in "Inorganic Chemistry" and Analytical Chemistry for students in Pharmacist Assistant and lectures in the elective subject: "Environment and Health" for students in Pharmacy.

The attached study load report shows an average annual workload of 558 hours, which indicates a serious commitment of the candidate to the teaching and learning activities.

In the period 2018-2020 Anelia Gerasimova-Peneva has conducted lectures, seminars and laboratory exercises at the "Konstantin Preslavsky" University of Shumen: "Physical Chemistry" I and II parts and "Colloidal Chemistry" for students of the specialties "Medical Chemistry", "Chemistry and Environmental Protection", "Biology and Chemistry".

Anelia Gerasimova-Peneva participated as a co-author in textbooks on "Colloidal Chemistry: Lectures, Problems and Laboratory Exercises", 2025, published by the Medical University - Varna and a textbook on "Physical Chemistry: Lectures, Seminars, Problems and Laboratory Exercises", 2020, published by STENO - Varna for students of the specialties "Pharmacy", "Medical Chemistry", "Biology and Chemistry". She participates in the development of curricula, teaching aids, exam tests, collections for prospective students, etc.

4. Scientific research activity

4.1. Scientific indicators and implementation of the minimal national requirements (MNR)

To participate in the current competition, Anelia Gerasimova-Peneva submitted an academic report for the fulfillment of the minimal requirements (MNR) and evidentiary material for her scientific activity, distributed by indicators as follows:

Indicator A – The PhD thesis for the acquisition of the educational and scientific degree of "PhD" - **50 points**.

Indicator V4 – Ten scientific publications in journals referenced and indexed in world-renowned databases of scientific information (Web of Science and Scopus) are presented as an equivalent to a monograph/a research work - a total number of **156 points**, which exceed the requirement for 100 points for this indicator.

Indicator G7 - Scientific publications in journals referenced and indexed in the Web of Science and Scopus databases – 10 items. – with a total points – 237 points.

Indicator G10 – Published patent application or utility model application – 15 points.

Indicator G5-10 - total 252 points, which exceed the mandatory minimum of 200 points.

Indicator D11 - Citations in scientific publications indexed in world-renowned databases. According to the presented report, the number of citations of the scientific works of Anelia Gerasimova-Peneva is 65, which corresponds to **130 points** (with a required minimum of 50 points).

The comparison of the data presented in the academic reference with the MNR for the appointment of AP "Associate Professor" shows that the scientific production of Anelia Gerasimova-Peneva fully meets the requirements - Table 1.

Table 1. Summarized scientometric indicators of the candidate for occupation of AP " Associate Professor ".

Group of indicators	Contents	MNR	Data from Academic reference
A	PhD thesis for the acquisition of the educational and scientific degree of "PhD"	50	50
V4	Habilitation thesis - scientific publications in journals indexed in world-renowned databases of scientific information (Web of Science and Scopus)	100	156
G5-10	G7 - Scientific publications in journals indexed in the Web of Science and Scopus databases G10 - Published patent application or utility model application	200	252
D	Citations in scientific publications, referenced and indexed in Web of Science и Scopus	50	130
	Total for AP "Associate Professor":	400	588

In addition, 3 publications in scientific journals are presented, which are beyond the minimum scientometric requirements for holding the AP "Associate Professor ".

The total impact factor of the journals in which the candidate has publications is IF=48.260, according to the reference submitted by the candidate.

Both the PhD thesis and the scientific research and publications of Anelia Gerasimova-Peneva are in the scientific field of the announced competition.

Ch. Assist. Prof. Anelia Gerasimova-Peneva actively participates as an expert and researcher in 12 national scientific and educational projects and in three with European funding.

4.2. Scientific contributions

Ch. Assist. Prof. Anelia Gerasimova-Peneva is the author of published and presented scientific works in the field of one of the main directions, corresponding to the scientific priorities of MU-Varna - "Nutrition and Quality of Life". In the attached author's reference for the original scientific contributions, the scientific publications are grouped thematically into three main directions.

A large part of the candidate's scientific production is in the direction of *Biologically active substances from extracts and essential oils - composition, properties, therapeutic potential and application in pharmacy and cosmetics, and as food supplements* - 10 publications. The following main contributions to scientific research stand out: The comparative chemotypic and functional assessment of essential oils from chamomile species cultivated in Bulgaria. The studies of the chemical composition and biological activity of samples of St. John's wort essential oil (*Hypericum perforatum* L.) from Bulgaria, which established pronounced antibacterial activity and a significant in vitro anti-inflammatory effect.

Important contributions with a pronounced applied nature in this direction are: the created multispectroscopic approach for metabolic profiling and quality control of *Moringa oleifera* and the first systematic assessment of the radionuclide content and radiation risk when consuming black elderberry in Bulgaria.

Studies on the metabolic profile, antioxidant, antimicrobial, anti-inflammatory potential and contractile reflex of the leaves of *Moringa oleifera* (India) have shown the strongest antimicrobial and anti-inflammatory activity of ethanol extracts from the plant. The obtained results determine the extracts of *Moringa oleifera* as a suitable ingredient and additive for pharmaceutical products with antimicrobial, antioxidant, anti-inflammatory and antispasmodic activity.

This thematic direction also includes studies on the metabolic profile of the leaves and pulp of *Passiflora caerulea* L. (Bulgaria) and their biological activity. The obtained results show that the extracts of *P. caerulea* leaves have a higher anti-inflammatory activity than the extracts prepared from the pulp. The presence of biologically active substances such as the amino acid histidine, palmitoleic acid, β -sitosterol and essential trace elements in *P. caerulea* extracts suggests their application as an active ingredient in various food supplements or cosmetic products.

The second scientific direction in the research work of the candidate Gerasimova is: *Application of microalgae extracts in the food industry and for the purposes of the pharmaceutical and cosmetic industries* – 8 scientific publications. Main contributions that stand out with particular importance in this thematic direction are: the created procedure for optimization and modeling of the drying of functional fruit products with microalgae; the chemical and metabolomic characterization and safety assessment of *Arthrospira platensis* from Bulgaria; the development of encapsulation systems for stabilizing phycocyanin with Ca(II)-alginate microspheres; as well as an assessment of the functional and pharmacokinetic properties of phycocyanin.

Under the third thematic area, *Determination of the content of phycotoxins in Black Sea mussels from the Bulgarian Black Sea coast*, major scientific contributions have been formulated, such as: the systematic assessment of lipophilic marine biotoxins in mussels from the Bulgarian Black Sea coast and the risk assessment regarding marine biotoxins when consuming mussels from the Bulgarian coast for different population groups, etc.

I accept all original scientific contributions in the attached author's reference, which demonstrate the research skills and interdisciplinary knowledge of Chief Assistant Professor Anelia Gerasimova-Peneva in the field of the indicated thematic areas.

5. Conclusion

Ch. Assist. Prof. Anelia Gerasimova-Peneva has many years of teaching experience in Physical Chemistry and Colloidal Chemistry. In her teaching work, she demonstrates professionalism and dedication, which are the basis for her high achievements. My personal impressions of her academic development and the scientific output presented give me reason to assume that she possesses the necessary qualities and professional competencies to occupy the AP "Associate Professor ".

The documents and evidentiary materials submitted for the competition by Ch. Assist. Prof. Anelia Gerasimova-Peneva, fully meet the requirements of the Law for development of the academic staff in the Republic of Bulgaria, the Rules of its application, the Regulations for the Development of the Academic Staff of the Medical University – Varna and exceed the criteria for the acquisition of academic position "Associate Professor ". I confidently express my positive assessment and recommend to the members of the esteemed jury to make a decision Ch. Assist. Prof. Anelia Gerasimova-Peneva, Ph.D. to occupy an academic position "Associate Professor " in the specialty "Physical Chemistry with Colloidal Chemistry" in the field of higher education 4. Natural sciences, mathematics and informatics, professional field 4.2. Chemical Sciences.

05.05.2026

Varna

Member of the Scientific Jury:

(Assoc. Prof. Stanislava Georgieva)

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