OPINION

by Prof. Svetlana Fotkova Georgieva, D.Pharm.

Dean of the Faculty of Pharmacy, Department of Pharmaceutical Chemistry, Faculty of Pharmacy,

Medical University "Prof. Dr. Paraskev Stoyanov" – Varna

member of the scientific jury pursuant to Order No. R-109-68/28.01.2026

of the Rector of Medical University – Varna

Re: *Competition for the academic position of "Professor" in the field of higher education 7. "Healthcare and Sports", professional field 7.3. "Pharmacy", specialty "Technology of Dosage Forms and Biopharmaceutics", announced in State Gazette No. 102/28.11.2025, for the needs of the Faculty of Pharmacy, Department of Pharmaceutical Technologies.*

By Order No. R-109-68/28.01.2026 of the Rector of Medical University – Varna, I have been appointed as a member of the Scientific Jury, and pursuant to Minutes No. 1/09.02.2026 from the first session held, I have been assigned to prepare an opinion on the procedure for filling the academic position of "Professor" in the specialty "Technology of Dosage Forms and Biopharmaceutics". The sole candidate in the competition is Assoc. Prof. Velichka Yordanova Andonova, D.Pharm. The procedure was conducted in compliance with all regulatory requirements, and the documents submitted by the candidate conform to the Law on the Development of the Academic Staff in the Republic of Bulgaria (LDASRB), its Implementing Regulations, and the Regulations for the Development of the Academic Staff (RDAS) of Medical University "Prof. Dr. Paraskev Stoyanov" – Varna, as well as the criteria therein for filling the academic position of "Professor".

Biographical Data and Professional Development of the Candidate

Assoc. Prof. Velichka Yordanova Andonova was born in 1973 in Pazardzhik. In 1996 she obtained a Master's degree in Pharmacy from the Medical University – Sofia, and in 2014 she was awarded a PhD in "Technology of Dosage Forms and Biopharmaceutics" at the Medical University – Plovdiv, with a dissertation entitled "Indomethacin Nanoparticles – Drug-Releasing Systems for Ocular Application".

Her academic qualifications were further enhanced through postgraduate specialization in "Drug Technology with Biopharmaceutics", as well as a number of additional qualification courses including "Pedagogical Competence", "Safety Assessment of Cosmetic Products", "Innovative Educational Technologies", and "Protection and Humane Treatment of Experimental Animals Used for Educational or Scientific Purposes". Additionally, a three-month outgoing research and training mobility at the Ovidius University of Constanța – Romania substantially broadened her expertise.

Her professional career began in 1997 in a community pharmacy. During the period 2005–2018, she successively held the academic positions of "Assistant" and "Chief Assistant" in the Department of Pharmaceutical Sciences at the Medical University – Plovdiv. In 2018, Velichka Andonova was elected "Associate Professor" at the Medical University "Prof. Dr. Paraskev Stoyanov" – Varna in the scientific specialty "Technology of Dosage Forms and

Biopharmaceutics", after which she was also appointed head of the academic section "Technology of Dosage Forms and Biopharmaceutics" within the Department of Pharmaceutical Technologies.

Assoc. Prof. Andonova has considerable managerial experience – since 2020 she has been Head of the Department of Pharmaceutical Technologies, and during the period 2020–2024 she held the position of Vice-Dean for "Academic Activities, Accreditation and Quality" at the Faculty of Pharmacy, Medical University – Varna. Her academic career is complemented by active expert activities at national and international level – she is a member of the Expert Council on Advertising of Medicinal Products at the Bulgarian Drug Agency (2018–2020), of the Supreme Pharmaceutical Council (since 2023), of the Permanent Commission on Healthcare and Sports at the National Evaluation and Accreditation Agency (since 2024), as well as of the Editorial Board of Austin Journal of Analytical and Pharmaceutical Chemistry. She also participates as a guest editor in the journal Pharmaceutics.

Teaching Activities

The submitted documents demonstrate that Assoc. Prof. Andonova has considerable pedagogical experience and a rich teaching record – a total of 20 years, of which 8 years at the Faculty of Pharmacy of Medical University – Varna. She delivers lecture courses for students in the specialty "Pharmacy" (Master's level) in the disciplines "Technology of Dosage Forms", "Biopharmaceutics and Pharmacokinetics", and "Radiopharmacy"; and for students of "Pharmacy Assistant" (Professional Bachelor's level) in "Drug Technology with Biopharmaceutics". She actively participates in the teaching process in the following specialties: "Cosmetology", "Technology Transfer and Innovation in Pharmacy", "Artificial Intelligence in Healthcare" (in English), and "Artificial Intelligence in Biomedicine" (in English). Her total teaching load for the past 4 years amounts to 409 teaching hours per year, significantly exceeding the required standard set by the Regulations of Medical University – Varna.

Assoc. Prof. Andonova is the academic supervisor of three successfully defended PhD candidates and of seven doctoral students currently in training (Certificate No. 109-15/07.01.2026), as well as of five successfully defended diploma students. She also supervises trainees in the specialty "Drug Technology with Biopharmaceutics". Assoc. Prof. Andonova participates in the development and updating of the curricula for the disciplines she teaches and is co-author of three exercise workbooks and two collections of test questions for student self-preparation.

Research Activities

In the competition for the academic position of "Professor", Assoc. Prof. Velichka Andonova submits scientific output based on the following indicators:

- B4 – 10 full-text scientific publications in internationally renowned indexed databases, equivalent to a monographic work, of which 4 are with IF (165.81 pts., against the required minimum of 100 pts.).

- G7 – 17 scientific publications in journals indexed in internationally renowned databases (WoS and Scopus) with IF (218.72 pts., against the required minimum of 100 pts.).
- G8 – 3 scientific publications in non-indexed peer-reviewed journals or edited collective volumes (23.5 pts.). Total points for indicators G5–G9: 242.22 pts., against the mandatory minimum of 200 pts.
- 3 full-text publications in scientific journals and proceedings beyond the minimum scientometric requirements for the academic position of "Professor", indexed in internationally renowned databases (WoS and Scopus) with IF.
- 30 citations are presented, all under indicator D10. The total points for indicators D10–D12 is 450 pts., against the required minimum of 300 pts.
- Total points under indicator E14 (supervision of successfully defended PhD candidates): 80 pts.
- Assoc. Prof. Velichka Andonova holds a specialty in Drug Technology with Biopharmaceutics (E15 – 40 pts.) and supervises six trainees in the discipline, of whom three have successfully completed the specialty "Drug Technology with Biopharmaceutics" (E22 – 30 pts.).
- Assoc. Prof. Velichka Andonova is co-author of a total of 5 university textbooks and teaching aids (E21 – 27.33 pts.).
- E16 – evidence of participation in one national project (Certificate No. 110-90/12.01.2026) is presented (E16 – 15 pts.).
- E18 – Assoc. Prof. Velichka Andonova is the principal investigator of three successfully completed projects funded by the Science Fund of MU-Varna (Certificate No. 110-2537/22.12.2025); only two of them are presented for the competition (E18 – 60 pts.). Total points for indicators E13–E22: 252.33 pts., against the mandatory minimum of 100 pts.

As a supplement to the research activities of Assoc. Prof. Velichka Andonova, mention should also be made of 55 participations in scientific forums, of which 12 abroad, as well as participation in three ongoing and one completed project funded by the Science Fund of MU-Varna (Certificate No. 110-2537/22.12.2025).

Of the submitted publications (33 in total) with which Assoc. Prof. Velichka Andonova participates in the competition for the academic position of "Professor", 30 are in peer-reviewed journals indexed in the global databases Web of Science and Scopus, and of those, 24 have an impact factor.

A summary of the submitted scientific publications is presented in the table below:

Criterion	**APAS at MU-Varna**	**Submitted by candidate**
B4. Habilitation thesis = scientific publications (at least	100 pts.	165.81 pts. 10 full-text publications:

10) in internationally recognized indexed databases		- 4 with IF – B4:4, B4:5, B4:9 and B4:10 - 7 original studies - 3 reviews – B4:1, B4:4 and B4:5
G7. Publications and papers in scientific journals indexed in internationally recognized databases (WoS and Scopus) with IF	200 pts. (≥100 pts. from criterion 7) 20 publications, of which 15 in Scopus/Web of Science, incl. 8 with IF	218.72 pts. 17 full-text publications: - 17 with IF - 10 original studies - 7 reviews – G7:1, G7:2, G7:3, G7:4, G7:6, G7:11 and G7:12
G8. Publications in non-indexed peer-reviewed journals or edited collective volumes		23.5 pts. 3 full-text publications, one in Bulgarian: - 2 original studies - 1 review – G8:1
Full-text publications beyond minimum requirements for the academic position of Professor		3 full-text publications: - 3 with IF - 2 original studies - 1 review (article No. 1)

The overall impact factor for the entire scientific career of Assoc. Prof. Velichka Andonova is impressive – **104.669**, of which **93.10** was accumulated after obtaining the academic position of Associate Professor. As of 16.03.2026, her scientific publications have been cited more than **650 times in Scopus (h-index 14)** and more than **520 times in WoS (h-index 14)**, attesting to high scientific value and authority.

Overall Assessment of the Candidate's Compliance with the Mandatory Conditions and Quantitative Criteria and Scientometric Indicators pursuant to LDASRB and the Regulations for the Development of the Academic Staff at MU-Varna

Assoc. Prof. Velichka Andonova presents evidence of compliance with the mandatory conditions and quantitative criteria and scientometric indicators pursuant to LDASRB and the Regulations for the Development of the Academic Staff at MU-Varna for filling the academic position of "Professor" in the field of higher education 7. "Healthcare and Sports", professional field 7.3. "Pharmacy" (total 1160.36 pts.), and the materials submitted exceed the minimum national requirements and those of the RDAS of MU-Varna (750 pts.).

Assessment of Scientific Contributions

The research activities of Assoc. Prof. Velichka Andonova are directed towards the development, characterisation and application of nanoscale drug delivery systems designed to improve the unfavourable physicochemical characteristics of medicinal or biologically active substances of natural origin, ensuring controlled release and an enhanced pharmacotherapeutic effect. The research covers the following main scientific areas:

I. Biologically Active Substances of Natural Origin – Challenges in Their Formulation into Dermal Dosage Forms and Cosmetic Products

The original scientific contributions from research presented in the area "Biologically Active Substances of Natural Origin – Challenges in Their Formulation into Dermal Dosage Forms and Cosmetic Products" may be summarised as follows:

1. A stable bigel formulation containing HP-rich St. John's Wort extract has been proposed, prepared by combining a hydrogel (poloxamer 407 25% and water 75%) and an organogel (borage oil 85% and Span® 60 15% as gelling agent) in a 70:30 ratio, with potential application in the healing of incised wounds.

2. An effective carrier of α-bisabolol has been proposed as a first step in the development of a cosmetic product with cleansing and antimicrobial action for facial skin hygiene.

3. The developed and characterised carriers (bigels and micellar solutions) of physicochemically "problematic" biologically active substances possess appropriate stability, mechanical and rheological characteristics for skin application, ensuring the stability, solubility, required bioavailability and pharmacotherapeutic effect of the incorporated substances. The proposed technological compositions may find practical realisation in the preparation of magistral prescriptions and as medicinal and/or cosmetic products after appropriate scaling of the manufacturing process.

II. Nanoscale Drug Delivery Systems

Sub-area: "Lipid-Based Nanoscale Drug Delivery Systems"

Sub-area: "Silver Nanoparticles and Their Conjugates"

The original scientific contributions from publications in the area "Nanoscale Drug Delivery Systems" may be summarised as follows:

1. A semi-solid dosage form (bigel) composed of a gelled dispersion of nanostructured lipid carriers incorporating HP-rich Hypericum perforatum L. extract has been proposed; it successfully stabilises the extract, offers microbicidal effects of the HP-NLC dispersions against K. pneumoniae, S. aureus and C. albicans, ensures superior wound-healing effects, and allows the cyto-/hepatoprotective potential of the active substance to be manifested.

2. An active complex obtained by "green" reduction of Ag+ with catechins extracted from Camellia sinensis (green tea) leaves and conjugation with chlorhexidine has been successfully prepared and optimised. Owing to the distinctive antimicrobial properties of the newly synthesised conjugates against Influenza type A and B, Herpes simplex virus 1, Gram (–) and Gram (+) bacteria, and fungi, they may find application in the treatment of poorly healing and infected wounds of the skin and mucous membranes,

aphthous stomatitis, and other skin and mucosal conditions associated with these pathogens.

III. Nasal and Oromucosal Drug Delivery

The original scientific contributions from publications in the area "Nasal and Oromucosal Drug Delivery" may be summarised as follows:

1. SN-Cx conjugates have been successfully combined with an in situ thermogelating base composed of poloxamer 407 16% and hypromellose 0.1%. The proposed nasal dosage form is distinguished by excellent physico-mechanical and biopharmaceutical characteristics and preserved anti-infective activity against seasonal influenza virus, beta-coronavirus, and other pathogens, and has the potential to be used as a protective nasal spray against respiratory infections.

2. The proposed intranasal dosage form for brain delivery of levodopa incorporating α-bisabolol as a penetration enhancer has the potential to reduce the adverse effects of levodopa compared with oral dosage forms.

IV. Biologically Active Substances from Aquacultures – Extraction Methods and Applications

The original scientific contributions from publications in the area "Biologically Active Substances from Aquacultures – Extraction Methods and Applications" may be summarised as follows:

1. Convection-dried Arthrospira platensis and lyophilised Chlorella spp. grown in a bioreactor can provide the physical stability of colloidal and emulsion systems owing to their high protein content. This is a novel application of these aquacultures that may find practical realisation and replace synthetic emulsifiers in certain cases, not only ensuring the desired stability and rheological characteristics, but also contributing to more sustainable and "green" production.

2. The ultrasonic extraction process of phycocyanin from Arthrospira platensis may be proposed as a "green" method for its isolation. By varying the operating conditions (temperature, process duration, and ultrasonic frequency), phycocyanin with different purity indices suitable for food, cosmetic and biomedical purposes can be obtained.

3. The integrated approach applied for predicting the structure–activity and structure–cytotoxicity relationships of phycocyanin through instrumental and in silico analytical methods indicates that the oral route of administration, and specifically its inclusion in gastro-resistant dosage forms, is appropriate, given the predicted safety, excellent intestinal absorption and potential therapeutic benefits, including cardiovascular effects, anti-inflammatory activity, neuroprotection and immunomodulation. This could expand the therapeutic application areas of phycocyanin and guide its formulation into dosage forms with potential to ensure a higher bioavailability.

V. Ensuring the Physical Stability and Rheological Characteristics of Liquid and Semi-Solid Dosage Forms Using Natural Polymers and Lipids

The original scientific contributions from publications in the area "Ensuring the Physical Stability and Rheological Characteristics of Liquid and Semi-Solid Dosage Forms Using Natural Polymers and Lipids" may be summarised as follows:

1. The proposed formulation of an oral suspension with NTF for magistral prescriptions for age-specific patient groups represents a contribution of scientific and practical value, demonstrating that consideration of viscosity-enhancing excipients such as xanthan gum and sodium carboxymethylcellulose can significantly improve dosage form stability and treatment adherence.

2. For the first time, physically and thermodynamically stable SDEDDS with NaALD (7%, w/w), based on coconut oil, polysorbate 80, sorbitan monooleate, phosphatidylcholine, gelatin and water, which self-emulsify in aqueous media (0.1N HCl) to microemulsions, have been formulated.

3. The developed and characterised cosmetic creams successfully demonstrate that the type and concentration of natural oils exert a significant influence on the textural and rheological properties of cosmetic creams. The identified optimal formulations offer the desired characteristics for effective skin application, ensuring sufficient contact time for the active ingredients to exert their beneficial effect.

I consider that the scientific works of Assoc. Prof. Velichka Andonova possess applied scientific merit and represent an original contribution in the field of the announced competition for the academic position of "Professor" in the specialty "Technology of Dosage Forms and Biopharmaceutics".

CONCLUSION

Following an analysis of the scientific, teaching and expert activities of Assoc. Prof. Mag.-Pharm. Velichka Andonova, D.Pharm., it may be concluded that she fully meets all state and institutional requirements for filling the academic position of "Professor". Her scientific achievements and scientometric indicators significantly exceed the minimum requirements stipulated by the Law on the Development of the Academic Staff in the Republic of Bulgaria, its Implementing Regulations, and the Regulations for the Development of the Academic Staff at Medical University "Prof. Dr. Paraskev Stoyanov" – Varna.

In connection with the foregoing, I confidently give my positive assessment and recommend that the esteemed members of the scientific jury vote in favour of the appointment to the academic position of "Professor" in the specialty "Technology of Dosage Forms and Biopharmaceutics" in professional field 7.3 Pharmacy, in the field of higher education 7. Healthcare and Sports, by Assoc. Prof. Velichka Yordanova Andonova, D.Pharm.

Date: 18.03.2026

Varna

Prepared by:

Заличено на основание чл. 5, §1, б. „В“ от Регламент (ЕС) 2016/679

/Prof. Svetlana Georgieva, D.Pharm./