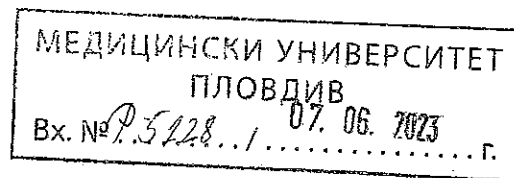


To the Chair of the Scientific Jury,
appointed by order № R - 1182/ 05.05.2023
of the Rector of the Medical University – Plovdiv
15A, Vassil Aprilov Blvd
4002 Plovdiv

Re: Protocol №1/10.05.2023

(date of the 1st meeting)



Hereby, I present: an OPINION

on the competition for filling the academic position of an “Associate Professor”
in scientific specialty „*Pharmaceutical Technology and Biopharmacy*”
announced in the State Gazette, no. 19 from 28.02.2023
for the needs of the Department of Pharmaceutical Sciences of the Medical University – Plovdiv

Author of the opinion: Prof. Ivaylo Vladimirov Dimitrov, PhD
Scientific specialty: „Chemistry of High Molecular Weight Compounds”
Institution: Institute of Polymers, Bulgarian Academy of Sciences

OPINION

by

Prof. Ivaylo Vladimirov Dimitrov, PhD
Institute of Polymers, Bulgarian Academy of Sciences

member of the Scientific Jury, appointed by order № R-1182/05.05.2023 of the Rector of the Medical University – Plovdiv regarding a competition for filling of the academic position of an Associate Professor in the field of higher education 7. Healthcare and Sports, professional field 7.3. Pharmacy, scientific specialty “Pharmaceutical Technology and Biopharmacy” at the Department of Pharmaceutical Sciences, section “Pharmaceutical Technology and Biopharmacy, announced in the State Gazette, no. 19 from 28.02.2023

I. Analysis of the candidate's career profile.

The only candidate for the announced competition is Chief Assistant Professor Plamen Dimitrov Katsarov, PharmDr. Dr. Katsarov graduated from the Medical University (MU) - Plovdiv in 2012 with a master's degree in pharmacy. He worked as a master pharmacist in Pharmatrading Ltd. In 2012, he was appointed to the position of an Assistant Professor in Pharmaceutical Technology and Biopharmacy at the MU – Plovdiv. He obtained the PhD degree at the same university in 2017 after successfully defending his PhD thesis on the topic "Polymer microspheres with doxylamine and pyridoxine for nasal administration". Since 2018, Dr. Katsarov holds the academic position of Chief Assistant Professor in the Department of Pharmaceutical Sciences of MU - Plovdiv. In 2018, he acquired the specialty "Drug Technology with Biopharmacy" from the postgraduate training programs at the Ministry of Health. Since 2020, Dr. Katsarov has been a researcher at the "Pharmaceutical Innovations for Personalized Medicine" direction of the Scientific Research Institute of the MU - Plovdiv, and since 2023 – a senior associate at the "Strategic Research and Innovation Development Program of the MU - Plovdiv" to the "Research Group on Biomaterials and Nanostructures for Drug Delivery". Chief Assistant Professor Katsarov received the maximum grade (Very good) from the latest attestation according to the presented attestation sheet for the period 2019-2021.

II. General description of the submitted materials for the competition.

Chief Assistant Professor Plamen Katsarov has submitted for participation in the competition a complete set of all necessary documents and evidentiary materials, in accordance with the requirements of the Development of Academic Staff in the Republic of Bulgaria Act (DASRBA), the Rules for its Application (RADASRBA) and the Rules for Academic Development at the MU – Plovdiv.

III. Evaluation of the candidate's scientific works for the overall academic development.

Chief Assistant Professor Plamen Katsarov participates in the competition with 26 scientific publications in specialized journals and one chapter of a collective monograph. Of these, 13 have been published in scientific journals, that are referenced and indexed in world-renowned databases with scientific information (Scopus and/or Web of Science), of which 12 are in journals with an impact factor (Clarivate Analytics), with an overall value of 36.67. The candidate also participates in the competition with a monograph in co-authorship, entitled "Polysaccharide microcarriers for drug delivery", which meets all the requirements according to DASRBA. At the time of application, the scientific works of Chief Assistant Professor Katsarov have been cited 128 times in scientific publications, referenced and indexed in world-renowned databases with scientific information (Scopus and Web of Science), and his *h*-index is 7. The results of the candidate's scientific research have been presented at 21 national and 9 international scientific forums. He participated in the implementation of 11 national scientific or educational projects.

The main directions in the candidate's research activity can be summarized as follows: development and characterization of microsized carriers of active substances based on natural polymers; research related to the extraction and evaluation of the biological activity of polysaccharides of natural origin; analysis of biologically active substances in pharmaceuticals. The research contributions are of an original, scientific and scientific-applied nature:

- Methods for the preparation of polymer microparticles based on natural polymers (cross-linked and non-cross-linked) as carriers of pharmaceuticals or essential oils have been developed and optimized applying the spray drying technique.
- Methods for extraction and characterization of polysaccharides of natural origin have been optimized. The biological activity of the obtained polysaccharides was evaluated.
- Spectral methods for the quantitative determination of active substances (individual or as mixtures) in pharmaceutical dosage forms have been developed and validated in combination with chemometric techniques.

IV. Evaluation of the monograph presented for participation in the competition.

The presented monograph in co-authorship entitled "Polysaccharide microcarriers for drug delivery" (ISBN 978-619-189-217-4) was published in 2023, contains 266 pages and is divided into two thematically related parts. Chief Assistant Professor Katsarov is the author of Part I of the monograph, entitled "Polymer microparticles for drug delivery" (written on 120 pages), which fully meets the requirements for a monograph set by DASRBA. The various types of microparticles and the ways of their administration into the body are presented. Special attention is paid to the methods of preparation and characterization of polysaccharide microsized drug carriers. The results from candidate's own research on polysaccharide microparticles are also presented. The monograph is

well-written, demonstrating the author's deep knowledge of the problems under consideration and is of interest to scientists developing polymer-based systems for controlled drug delivery applications.

V. Reflection (citation) of the candidate's publications in the national and foreign literature.

Chief Assistant Professor Plamen Katsarov presents evidentiary materials for 128 citations of 12 publications that appear in the Scopus database. The citations are mainly from foreign authors in international journals. Taking into account the number of publications and the stage of the candidate's academic development, this is a very good indication for the relevance of the topics developed by him as well as for the interest of the scientific community.

VI. Complex, qualitative assessment of the candidate's education-methodological and teaching activities.

The presented reference on the teaching workload of Chief Assistant Professor Plamen Katsarov for the last 3 years (2019 - 2020, 2020 - 2021 and 2021 - 2022) shows 709, 864 and 724 hours of teaching workload, respectively. This significantly exceeds the norm of 360 hours for non-habilitated lecturers at the MU - Plovdiv. The candidate gives lectures on "Pharmaceutical technology with Biopharmacy, Part II" to the second-year students in the specialty "Assistant Pharmacist" at the Medical College, participates in the preparation of teaching materials, conducts consultations with students, carries out joint work with students and doctoral students within research projects. He participates in examination committees on "Pharmaceutical technology – parts I and II" and "Biopharmacy and Pharmacokinetics" both in Bulgarian and in English.

VII. Critical notes and recommendations.

I have no significant critical remarks towards the candidate and the presented materials for the competition.

VIII. General assessment of the candidate's compliance with the minimum national requirements under Art. 2b, items 2 and 3, respectively, to the requirements under Art. 2b, item 5 of the DASRBA and the specific requirements, defined in the Rules for Academic Development at the Medical University - Plovdiv.

From the presented self-assessment Table concerning the implementation of the national and specific for MU - Plovdiv minimum scientometric requirements for acquiring the academic position "Associate Professor" it is clear that Chief Assistant Professor Plamen Katsarov meets and moreover, significantly exceeds them for most groups of indicators. The minimum requirements for *indicators A and B* have been met by the candidate, as he holds the PhD degree and has presented a monograph. Concerning the *group of indicators C*, the candidate has presented publications giving 247.67 points with the minimum required 200 points. Concerning the *group of indicators D*, the

number of citations of the works of Chief Assistant Professor Plamen Katsarov result in 1920 points (min. required 300 points). Regarding the *group of indicators E*, the candidate has 200 points (min. required 50) as a result of the acquired medical specialty and his participation in national scientific and educational projects. The *group of indicators F*, reflecting the candidate's teaching activity give 1119.5 points with a minimum required 560 points. Thus, the total score for all indicator groups that are mandatory for acquiring the academic position "Associate Professor" is 3642.17 points, significantly exceeding the minimum required 1270 points.

IX. Conclusion

The documents presented for the competition demonstrate that Chief Assistant Professor Plamen Dimitrov Katsarov, PharmDr. fully meets the mandatory and specific conditions and scientometric requirements for filling the academic position "Associate Professor", as defined in the Development of Academic Staff in the Republic of Bulgaria Act and the Rules for its Implementation, as well as those specified in Rules for Academic Development at the MU – Plovdiv. Therefore, I give my *positive assessment* and I recommend to the Distinguished members of the Scientific Jury to support the election of Chief Assistant Professor Plamen Dimitrov Katsarov, PharmDr. at the academic position "Associate Professor" in the field of higher education 7. Healthcare and Sports, professional field 7.3. Pharmacy, scientific specialty "Pharmaceutical Technology and Biopharmacy".

Date:

06.06.2023

Author of the

Задължено на основание
Чл. 5 § 1, б. "в" Регламент (ЕС) 2016/679

/Prof. Ivaylo Dimitrov, PhD/