

# OPINION STATEMENT

by Prof. Elena Borisova Dzhambazova, Ph.D.

Department of Chemistry and Biochemistry, Physiology and Pathophysiology  
Faculty of Medicine, Sofia University "St. Kliment Ohridski"

Member of a scientific jury appointed by order of the Rector № RD-38-541/15.09.2023

Subject: Competition for the academic position "**Associate Professor**" in the field of higher education 4. Natural sciences, mathematics, and informatics, Professional field 4.3 Biological sciences (Cell biology), announced in the State Newspaper issue 56/30.06.2023, with candidate Chief Assistant Professor Lubomira Dimitrova Yocheva, Ph.D.

The formation of the assessment for the final opinion statement is based on the minimum national requirements of the Law for the Development of Academic Staff in the Republic of Bulgaria (LDASRB) and the Regulations on the terms and conditions for acquiring scientific degrees and holding academic positions at the Sofia University "St. Kliment Ohridski".

For the current competition, the applicant Chief Assistant Professor Lubomira Dimitrova Yocheva submits

- Official notes certifying that he is a holder of courses at the Faculty of Medicine, Biology, and Physics of Sofia University;
- 23 scientific publications in refereed and indexed editions in Scopus and/or WoS databases, which do not repeat those presented for the defense of a Ph.D. degree.

## 1. Educational and teaching activities

Dr. Lyubomira Dimitrova Yocheva has been teaching microbiology as an assistant and later as a chief assistant to students majoring in "Medicine" and "Medicine in English" since the start of the Faculty of Medicine of SU "St. Kliment Ohridski" in 2007, when the first "Medicine" graduating class was accepted. She has been actively involved in the development, implementation, and material provision of the current microbiology practicum curriculum for students majoring in Medicine and Medicine in English, as well as for students majoring in Nursing.

In the **Faculty of Medicine** of the SU "St. Kliment Ohridski" from the academic year 2008/2009 until now, the candidate has conducted:

- **4464 hours** of exercises in "Microbiology" for students from the "**Medicine**" specialty at the Faculty of Medicine of the SU,
- **2565 hours** of exercises in "Microbiology" for students from the "**Medicine in English**" specialty at the Faculty of Medicine of the SU,

- **120 hours** of exercises in "Virusology" in the course "Microbiology, Parasitology and Virology" for students from the "Nursing" specialty at the Faculty of Medicine of the SU.

In the Faculty of Physics of the SU "St. Kliment Ohridski" from the academic year 2013/2014 until now, Dr. Yocheva has conducted a total of **240 hours** of microbiology exercises for students from the specialty "Optometry" OCS "Bachelor" and OCS "Master" regular and part-time studies.

In the Faculty of Biology of the SU "St. Kliment Ohridski" from the academic year 2007/2008 until now, she has:

- **1194 hours** of exercises in microbiology for students from the specialties "Biology", "Geography and Biology" and "Biology and Chemistry", OCS "Bachelor" full-time and part-time studies,
- **310 hours** of exercises in the Taxonomy of Microorganisms course for students in the Master's program in Microbiology and Microbiological Control.

In addition to the listed courses in three different faculties, Dr. Yocheva is developing a curriculum for 30 hours of lectures and 15 hours of practical exercises for the course "Protective Mechanisms in Bacterial Infections" in Bulgarian and English for students from the Master's Program "Biochemistry" at the Faculty of Biology SU "St. Kliment Ohridski", which leads from the 2018/2019 school year until now.

An official note from the Department of Biochemistry of BF-SU is presented, certifying that Dr. Lyubomira Dimitrova Yocheva has conducted: the course "Immunodiagnosics of pathogens" in the 2017/2018 academic year - 18 hours of lectures and 9 hours of exercises and for the period 2019-2023 d. course "Protective mechanisms in bacterial infections" with the following hours: 162 hours of lectures in Bulgarian and 36 hours of lectures in English, 40.5 hours of exercises in Bulgarian, and 9 hours of exercises in English.

According to a report made by the Ministry of Education, Department "Educational Activities", about the study load in the last 5 years (2017-2023), Dr. Yocheva has 4370.7 hours of total employment, of which 3934.3 hours are in the classroom. This is about 787 hours per year, or more than twice the required classroom employment for an assistant professor.

## 2. Scientific research activity

After the defense of the doctoral degree in 1997, the scientific production of Ch. Dr. Lubomira Yocheva, assistant professor, includes 52 publications, 50% of which are in journals referenced and indexed in WoS and Scopus, which speaks of her serious and significant scientific activity. For the current competition, Dr. Yocheva participated in 23 publications in refereed and indexed journals with quartiles (Q1 to Q4) and impact factor. One publication with Q1, 2 - with Q2, 13 with Q3, and 7 with Q4. The overall impact factor (IF) of the publications submitted for the competition is 16.108, and the individual IF is 1.89. Six of these 23 refereed publications are collected in Group B.4 indicators with a total number of points of 105, with the required 100 according to the minimum national requirements. The remaining 17 publications are included in Group of Indicators D.7, carrying a total of 239 points, out of the required 200.

The scientific works presented in the competition can be systematized in the following main scientific and scientific-applied areas: 1. Antimicrobial activity of naturally produced biologically active substances and nanomaterials. 2. Isolation and characterization of bacteria of importance in food technology and biotechnology. 3. Sanitary-microbiological assessment of water for drinking and household needs. 4. Prevalence of some bacterial and viral infections in Bulgaria and their relationship with inflammatory, allergic, or autoimmune diseases. 5. Contributions to academic education

After reviewing the titles from the list of publications and the attached abstracts, I believe that the scientific work and scientific-applied contributions of Ch. Associate Professor Yocheva is entirely in the "Microbiology" specialty and corresponds to the subject of the announced competition for the academic position of "Associate Professor".

In Group of Indicators D regarding citations in scientific publications, monographs, collective volumes, and patents, referenced and indexed in world-famous databases with scientific information (Web of Science and Scopus), Dr. Yocheva presented 39 citations, which brought a total of 78 points (minimum points required: 50).

Dr. Yocheva is the scientific supervisor of 3 graduates from the Master's program "Microbiology and Microbiological Control" at the Department of "General and Industrial Microbiology" of the Faculty of Biology at SU "St. Kliment Ohridski" in the period 2007-2009.

As a chief assistant at the Faculty of Medicine, the candidate participated in a total of 15 scientific projects, 3 of which were funded by the National Research Institute of the Ministry of Education and Science. These national projects are presented in Group of Indicators E.14. The scientific areas in which she conducted research are related to 1) Medical microbiology and immunology; 2) Food microbiology, the probiotic potential of lactic acid bacteria (LAC) – isolation and characterization of the probiotic potential and antimicrobial activity of strains of lactic acid bacteria from different sources (raw-dried sausages, sour rye dough, dairy products, etc.), which becomes the basis for including certain ICD strains in probiotic preparations for children and adults from the Lactoflor series (Kendy Pharma); 3) Antimicrobial activity of medicinal plant extracts; 4) Antimicrobial activity of newly synthesized and commercial nanomaterials; 5) Sanitary microbiology – study of the microflora of spring, borehole and bottled mineral waters. In all projects led by Dr. Yocheva and financed by the "Scientific Research" Fund of SU, students from the Faculty of Medicine and/or Biology of Sofia University were included and actively participated in the implementation of the research tasks.

In the Group of Indicators E.19 and E.20, respectively, 1 textbook "Food Microbiology. Microbiology of fresh foods" University Publishing House "St. Kliment Ohridski", Sofia, 2015, ISBN 978-954-07-3916-8, and 3 textbooks for the preparation of practical classes in microbiology for second and third-year students, majoring in "Medicine" and "Medicine in English" at MF of SU "St. Kliment Ohridski", in which Dr. Yocheva is a co-author. Although not required for the academic position of "associate professor", Dr. Yocheva has a total of 57 points in Group E indicators.

In conclusion, the scientometric indicators of ch. assistant professor Dr. Lyubomira Dimitrova Yocheva for the current competition exceeds the minimum required points in all

indicators for occupying the academic position "Associate Professor" according to LDASRB and the Regulations for its application.

## **CONCLUSION**

Evaluating the overall activity of the candidate Ch. Assistant Professor Dr. Lyubomira Dimitrova Yocheva, based on the presented scientific production, teaching activity, and my personal impressions of her qualities and preparation, I consider that she meets the requirements of the Law on the Development of the Academic Staff and the Regulations for its Application for the Employment of the academic position "Associate Professor" at SU "St. Kliment Ohridski".

I SUPPORT without hesitation the candidacy of Ch. Assistant Professor Dr. Lyubomira Dimitrova Yocheva and I recommend to the members of the respected scientific jury to vote POSITIVELY for her election to the academic position of "Associate Professor" in the professional field 4.3 Biological Sciences (Microbiology).

23 October 2023

Sofia

*Prof. Elena Dzhambazova, PhD*