

## STATEMENT

by Professor, Stoyan Angelov Shishkov, PhD  
Sofia University "St. Kliment Ohridski", Faculty of biology  
of the announced competition for the occupation of the academic position of  
"Professor" in the professional field 4.3. Biological Sciences (Microbiology)

In the competition for "professor", announced in the State Gazette, issue 40 / 14.05.2021 and on the website of Plovdiv University "Paisii Hilendarski", for the needs of the Department of Biochemistry and Microbiology, Faculty of Biology, as a candidate participates only associate professor, Dr. Sonya Kostadinova Trifonova from Plovdiv University "Paisii Hilendarski"

### **1. General presentation of the procedure and the candidate.**

Only associate professor, Dr. Sonya Kostadinova Trifonova, Faculty of Biology, „Paisii Hilendarski“ University of Plovdiv, submitted documents for participation in the competition. The set of documents submitted by the applicant on paper and electronic media is in accordance with the ones indicated in art. 77 (1) of the Regulations for development of the academic staff of the University of Plovdiv and includes: a set of administrative documents; lists of scientific papers and citations; research documents; reference for compliance with the minimum national requirements and the additional faculty requirements; habilitation report and self-assessment of the contributions. Also included are documents for the academic work and documents according to the additional requirements of the faculty; declaration of originality and authenticity of the attached documents. Attached is a list of the scientific papers with which he participated in the competition and evidence of the observed citations.

Associate Professor Trifonova has attached a list of 66 scientific papers: 1 monograph, 61 scientific publications, 5 textbooks and teaching aids, a list of research projects - 11 issues.

Scientific papers that are not related to the dissertation and the academic position of "Associate Professor", and participate in the competition - 37 in number. Their distribution is as follows: monograph - 1 issue, 18 scientific publications in journals with impact factor or impact rank, 12 publications in refereed journals without impact factor or impact rank, 3 publications in conference proceedings, 2 textbooks and 1 manual.

Associate Professor Sonya Trifonova graduated in 1988 from three specialties at Plovdiv University "Paisii Hilendarski" - Biology, Chemistry and biology teacher. She successfully defended her dissertation on "Purification and properties of phospholipase C and lipases from some Gram-negative bacteria" in 1992. From 1986 to 1988 Associate Professor Trifonova was a teacher at the Secondary School of Food Technology, Asenovgrad.

Her academic career began in 1990 as an assistant in the Department of Biochemistry and Microbiology at the Faculty of Biology, University of Plovdiv. Since 2003 she has been an associate professor in this department. The scientific activity of associate professor Trifonova is in the field of microbiology

The candidate has extensive administrative experience. Since 2015 he has been the Dean of the Faculty of Biology. She was Vice Dean of the Faculty of Law, Head of the Department of Biochemistry and Microbiology and a member of University commission for evaluation and accreditation at the University of Plovdiv. Associate Professor Trifonova invests her organizational skills in the procedures of program and institutional accreditation and in the preparation of curricula.

As a part-time lecturer at the Faculty of Biology at the University of Plovdiv, I formed an opinion about Assoc. Prof. Trifonova as an ethical and principled person with a professional attitude to his academic and scientific work. Subsequently, my opinion was strengthened by our collegial connections as administrators.

## **2. General characteristics of the candidate's activity.**

The teaching activity of Associate Professor Trifonova includes the lectures and exercises in seven microbiological disciplines at the Bachelor's Degree, in various specialties. In ACS "Master" teaches 4 disciplines. Her classroom employment is impressive. For the last year it is over 800 hours.

Associate Professor Trifonova is the author of a large number of curricula. 9 compulsory and 4 elective microbiological disciplines for bachelors and 4 compulsory disciplines for masters are covered.

Associate Professor Trifonova was the research supervisor of three successfully defended doctoral dissertations, as well as 8 graduates.

The teaching and pedagogical activity of the candidate shows the ability to successfully combine teaching with research and administrative work.

The scientific works, provided by associate professor Trifonova, can be systematized according to the scientific directions of her research work. Of these, 9 are related to studies of microbial enzymes and include 1 monograph of significant scientific value. The monograph presents its own original research on phospholipase enzymes produced by bacteria of the genus *Bacillus*. The results of studies on virulence and microbial pathogenesis are reflected in 12 publications. 15 publications present research in the field of ecology of microorganisms. Associate Professor Trifonova presented two textbooks and a textbook published by a university publishing house. She is the sole author of the textbook on microbial metabolism.



31 scientific papers have been published in English, and the rest - in Bulgarian. 18 articles have been published in impact factor / rank journals. The total IF is 8.006 and the total SJR-1.179. Two publications are in magazines with Q2, 8 - Q3 and 8 - Q4. 12 of the articles have been published in Bulgarian scientific journals, and 3 - in collections of national scientific forums. A monograph and 3 textbooks are presented. In 3 of the publications Associate Professor Trifonova has one co-author, in 7 - two co-authors, in 25 - more co-authors.

For participation in the competition, Associate Professor Trifonova provided a list of 11 projects with her participation. She was the leader of a project funded by the NSF, a project funded by the NSF of the University of Plovdiv and 2 projects related to the organization and holding of two Balkan Scientific Conferences in Biology. As a member of working groups he participates in 8 projects. Associate Professor Trifonova's project work is related to her research areas.

The candidate's scientific contributions are unquestionable. Scientific and applied contributions in the field of microbial enzymology are the establishment for the first time the production of phosphatidylinositol-specific phospholipase C of the species *B. Shaericus* and the optimization of the cultivation of strains producing similar enzymes (publications III.1., III.2.16. ).

The collection of bacteria and yeasts isolated from clinical materials and their characterization for the needs of the therapy of infections (publications III.1., III.3.10, III.3.7, III. 2.1, III.2.3, III.2.4. , III.3.4, III.3.11, III.3.12, III.2.5). The contributions in this direction are scientific and applied.

The scientifically applied contributions of Associate Professor Trifonova in the field of microbial ecology are undoubted. The microbiological status of the water of dams (works III.2.7, III.3.6. and III.3.8.), in different wetlands (works III.2.11. And III.2.18.) Has been determined. An important contribution is the construction of a new composite biosorbent for the removal of heavy metals from aqueous solutions (work III. 2.13, work III.2.17.).

The provision of the educational process in the Bachelor's and Master's degrees with textbooks and teaching aids is a contribution to the development of academic education (work III.5.1., III.5.2.).

The citations of the publications of associate professor Trifonova in Web of Science and Scopus are 101. 19 publications are cited. The article in Engineering in Life Sciences has the highest number of citations - 20. The h-index of publications is 7.

Analyzing the research activity of Associate Professor Trifonova, I am convinced that the presented scientific papers have scientific and scientific-applied significance, including for university education. Her works are recognizable by the international scientific community.

I believe that the candidate meets the minimum national requirements for the academic position of "professor", according to LDASRB:

Group of indicators	Contents	Academic requirements position of "professor"	<i>implementation by the candidate</i>
A	Indicator 1	50	50
B	Indicator 2	100	0
C	Indicator 3 or 4	100	100
D	Sum of indicators from 5 to 10	200	256
E	Sum of points in indicator 11	150	248
F	Sum of indicators from 12 to the end		
Total		<b>600</b>	<b>856</b>

### 3. Critical remarks and recommendations.

I have no critical remarks and recommendations to the candidate.

### CONCLUSION

The scientific papers and materials submitted by Assoc. Prof. Dr. Sonya Kostadinova Trifonova for participation in the competition for the academic position of "professor" meet all the requirements of the Law for the Development of Academic Staff in the Republic of Bulgaria, Regulations for development of the academic staff of Paisii Hilendarski University of Plovdiv.

The candidate has submitted a sufficient number of scientific papers for participation in the competition. They contain original scientific, scientific-applied and applied contributions and have been recognized by the international scientific community. The research and teaching activity of Assoc. Prof. Trifonova is at a high level and cannot be questioned.

I give a positive assessment and recommend to the members of the Faculty Council of the Faculty of Biology to vote positively for the election of Assoc. Prof. Dr. Sonya Kostadinova Trifonova to the academic position "Professor" at the University of Plovdiv "Paisii Hilendarski" in higher education: 4. Natural Sciences, Mathematics and informatics, professional field 4.3. Biological sciences (Microbiology).

31.10.2021

Prepared the opinion:

Prof., Dr. Stoyan Shishkov