

## **STATEMENT**

**by Assoc. Prof. Dr. Yulian Dimitrov Zagranjarski,**

Sofia University "St. Kliment Ohridski", Department of Organic Chemistry and Pharmacognosy about the materials submitted for the participation in a competition for the academic position

**Associate Professor in the Department of Organic Chemistry and Pharmacognosy of the Faculty of Chemistry and Pharmacy of Sofia University "St. Kliment Ohridski"**

**professional field 4.2. Chemical sciences in the scientific specialty Organic Chemistry – Organic photochemistry**

The competition for an associate professor in professional field 4.2. Chemical Sciences (Organic Chemistry – Organic photochemistry) has been announced in the State gazette issue 103 of 12.12.2023 for the needs of the Department of Organic Chemistry and Pharmacognosy at Sofia University, Faculty of Chemistry and Pharmacy. The only candidate in it is Ch. Assistant Professor Dr. Stanislava Borisova Yordanova-Tomova. The presented documents are in accordance with the Regulations for the Implementation of the Act for the Development of the Academic Staff in the Republic of Bulgaria (ADASRB), Regulations for the Development of the Academic Staff of the Sofia University, and meet the requirements of the Faculty of Chemistry and Pharmacy for the academic position "Associate Professor".

### ***I. Career development of the candidate:***

Ch. Assistant Professor Dr. Stanislava Borisova Yordanova-Tomova completed her higher education as a bachelor in 2009 and master in 2011 at the Faculty of Chemistry of Sofia University "St. Kl. Ohridski". In 2011, he joined the Department of Organic Chemistry as a doctoral student. Since 2014, he has a doctorate in 4.2. Chemical Sciences (Organic Chemistry), and in 2015 until now he holds the position of Principal Assistant.

## **II. Research activity:**

Ch. assistant professor Dr. Stanislava Yordanova-Tomova is a co-author of 23 scientific papers, of which 22 are in journals with an impact factor, 1 in journals without an impact factor. The candidate has submitted 19 publications on the issues of the competition, published in the period 2014-2020, which are not included in his doctoral dissertation and which I accept for review. All 19 publications are in journals with an impact factor (IF), distributed by category as follows: 2 - in journals with category Q1; with Q2 – 8, with Q3 – 8 and with Q4 – 1 publications. According to indicator B, 6 articles are indicated (of which 1 article with Q1, 3 articles with Q2, 1 article with Q3 and 1 article with Q4, a total of 112 items), and according to indicator D - 13 articles (1 article with Q1, 5 articles with Q2 and 7 articles with Q3, a total of 230 items). According to indicators C, D, D and E, the candidate exceeds the required number of points, according to the specific requirements of the FCP-SU for occupying the academic position "associate professor". The candidate's scientific works are published in refereed and indexed international journals and correspond to the announced scientific direction. Publications in journals with a high impact factor, such as *Dyes and Pigments*, *Sensors*, *Beilstein Journal of Organic Chemistry* and *Journal of Luminescence*, prove the high quality of the scientific output of ch. Stanislava Yordanova-Tomova, assistant professor, PhD. The scientific results have been presented in a total of 10 oral reports and poster presentations at national and international forums. At the time of submitting the documents for participation in the competition, 147 citations (referenced and indexed in Scopus) were noticed, the h factor is 7.

The publications presented for participation in the competition are in the field of synthesis, photophysical studies and sensory ability of a series of monomeric and dendrimeric compounds, as well as their metal complexes. The main contributions can be summarized in the following scientific directions:

- (1) Study of photophysical characteristics of newly synthesized compounds in solvents of different polarity – 15, 18;
- (2) Investigation of the sensory properties of the newly synthesized compounds to various metal ions – 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 14, 15, 17, 19;
- (3) Investigation of the influence of the pH of the medium on the absorption and fluorescence intensity - 7.

(4) Investigation of microbiological, antimicrobial and antibacterial properties of the newly synthesized complexes, as well as their copper and zinc complexes - 2, 3, 4, 5, 6, 8, 9, 11, 14, 17

According to the recommended requirements of the FCP of the SU, ch. assistant professor Dr. Stanislava Borisova Yordanova-Tomova submitted a habilitation thesis for participation in the competition. It is written in 25 pages and contains some of her achievements on the synthesis and characterization of new derivatives of 4-chloro-7-nitrobenzofurazan and 1,8-naphthalimides. The studies included in the habilitation work are part of the main thematic direction that the candidate has been developing in recent years. Dr. Yordanova-Tomova's scientific research has an indisputable contribution in various fields of organic synthesis and impresses with originality and resourcefulness. The publication of these results in renowned journals and their international resonance (over 140 citations), clearly shows their importance. The candidate is a participant or leader in six projects at the NSF or NSF of SU "St. Kl. Ohridski". Ch. assistant professor Dr. Stanislava Yordanova-Tomova has received an award named after Academician Ivan Yuhnovski "Outstanding Young Scientist in the Field of Organic Chemistry" for 2017.

### ***III. Teaching activity:***

Teaching activity of the chief as. Dr. Stanislava Borisova Yordanova-Tomova began in 2014 as an assistant professor at the Department of Organic Chemistry. Dr. Stanislava Yordanova-Tomova has supervised classes and seminars in Organic Chemistry I and II (Bachelor's degree) - all chemistry majors of the Faculty of Chemistry; as well as all majors of the Faculty of Biology who study organic chemistry. She has also taught classes in Organic Photochemistry for all chemistry majors. As. Dr. Stanislava Yordanova-Tomova has been a scientific supervisor of six successfully defended graduates in the field of organic synthesis.

### ***IV. Conclusion:***

Based on the above analysis, as well as personal impressions, I give my positive assessment of the teaching and research activities of Ch. Assistant Professor Dr. Stanislava Borisova Yordanova-Tomova. The documents and the materials submitted by the candidate in the competition Dr. Stanislava Yordanova-Tomova fully comply with the Act on the Development of the Academic Staff in the Republic of Bulgaria, the

Regulations for its implementation and the corresponding Regulations of Sofia University "St. Kliment Ohridski" and the topic of the announced competition for "Associate Professor".

I confidently recommend to the esteemed Scientific Jury and to the members of the Scientific Faculty Council of the Faculty of Chemistry and Pharmacy at Sofia University "St. Kliment Ohridski" to vote for the award of the academic position "Associate Professor" to Ch. Assistant Professor Dr. Stanislava Borisova Yordanova-Tomova in the professional field 4.2. Chemical sciences (Organic chemistry – Organic photochemistry).

25.03.2024 г.

Signature:

/Assoc. Prof. Dr. Yulian Zagranyski/