

REPORT

by Prof. Dr. Olya Stoilova Stoilova,
member of the Scientific Jury set to render a decision on the competition for filling the
academic position of an Associate Professor in the Professional Field 4.2. Chemical
Sciences (Organic photochemistry), published in the SG no. 63/30.07.2021

This Report is prepared in response to Order № RD38-448/15.09.2021 issued by the Rector of the Sofia University “St. Kl. Ohridski” (SU), following the decision made by the Academic Jury that was held on 11.10.2021. The Report is in compliance with Development of the Academic Staff in the Republic of Bulgaria Act (DASRBA), the Regulations on the implementation of the Development of Academic Staff in the Republic of Bulgaria Act (RIDASRBA), the Rules on the Conditions and Procedure for Acquiring Science Degrees and Holding Academic Positions in SU, as well as with the recommended criteria of the Faculty of Chemistry and Pharmacy for acquiring the academic position “Associate Professor” at SU in the Professional Field 4.2. Chemical Sciences.

Chief Assistant Professor Stanislav Stefanov Stanimirov PhD, is the only candidate on the competition for filling the academic position of an Associate Professor in the Professional Field 4.2. Chemical Sciences (Organic photochemistry), announced in SG no. 63/30.07.2021 at the Faculty of Chemistry and Pharmacy, SU.

1. Career development and assessment of the research accomplishments

Dr. Stanimirov graduated as a Bachelor in chemistry in 2002 at the Faculty of Chemistry of Sofia University “St. Kl. Ohridski”. In 2009 he received educational and scientific degree “Doctor of Philosophy” in the scientific specialty 01.05.03 Organic Chemistry, based on a defended dissertation on “*Synthesis and photophysical properties of ternary β -dicarbonyl Europium complexes with nitrogen-containing or poly(oxyethylene phosphate) ligands*”. From 2007 to 2009 he held the positions “chemist” and “assistant” (senior assistant), and since 2009 he has held the academic position of “Assistant Professor” at the Department of Organic Chemistry of the Faculty of Chemistry at SU.

In the competition, Dr. Stanimirov has participated with **16 research publications (5 in Group C.4 and 11 in Group D.7) all co-authored**. The publications are refereed and indexed in *Scopus* or *Web of Science (WoS)* and included 14 articles published in international journals with impact factor and 2 with SJR without IF. 8 of the publications are published in high-ranking journals (quartile Q1) for the respective year of publication, 3 are published in Q2, 4 of them are in Q3 and one in edition without quartile.

In the Group C.4, a total of **5 publications** equivalent to a habilitation thesis are presented. In 4 of them, Dr. Stanimirov is the first and the corresponding author, which proves his significant contribution to their development. **The total score for this indicator is 100**.

Out of the habilitation thesis, **11 articles are presented additionally in the Group D.7**. The Journal of publications 7 and 9, for the respective year of publication, is in a higher quartile

(Q1) of the SJR than those of the JCR (Q3/Q2). According to the Rules for the Application of the Development of Academic Staff in the Republic of Bulgaria Act, for the Professional Field 4.2. Chemical Sciences, the higher of these quartiles is used. No quartile is available for the Journal of publications 3 and 8 in the year of publication, and the available for the closest year is Q4 of the SJR. However, according to the evidence presented by the applicant, this Journal is in quartile Q3. In addition, the candidate submitted his documents in July 2021, and the change in the status from the “*Journal*” to the “*Conference and Proceedings*” by Scopus took place in August 2021, which explains the discrepancy in the quartiles. **Thus, the publications in this group give a total score of 230, instead of the calculated 220 points, against the minimum 220 required.**

In the Group E.11. a list of citations of 18 publications is provided, 2 of which are not submitted for participation in this competition. Referring in the Scopus database shows that the citations (excluding self-citations and citations by co-authors) only of the publications participating in the competition **are 92** out of a total of 99 **citations** of all research articles. Thus, **the score under indicator E is 184 points, with the minimum required 70.** The high number of the citations of the publications that participate in the competition compare to the total number of citations evidence of the good scientific level and the importance of the obtained results.

In the Group G a *h-index* of the candidate (**G.21.**) and his participation in scientific projects (**G.25.**) are provided. Referring in the Scopus database shows that the *h-index* of the candidate **is 6** (Ъошеи excluding self-citations and citations by co-authors). The candidate was a member of a total of 10 research projects and the leader of one. However, only 8 of them are included in the presented documents, in which the candidate is a participant. **Thus, the score in this group gives a total score of 100, with the minimum 70 required.**

The applicant's scientific output evaluation shows that in all Groups of indicators (C, D, E and G), the candidate Dr. Stanimirov exceeds the minimum requirements for filling the academic position Associate Professor in the Professional Field 4.2. Chemical Sciences.

The publications submitted for assessment are thematically related and in the field of organic photochemistry. The research is mainly devoted to the use of UV electron absorption and emission spectroscopy, as well as time-resolution techniques, to study the photophysical and physicochemical properties of various coordination complexes or organic molecules. The possibility of studying the dynamics of relaxation of the photoexcited state of molecules by ultrafast femtosecond transient absorption spectroscopy is also shown. The publications submitted for assessment may be classified thematically in the following fields: (i) Study of structural features of Eu(III)-complexes with β -dicarbonyl organic ligands by electron spectroscopy; (ii) Spectral characterization of newly synthesized electroluminescent organo-

iridium complexes with potential as organic light-emitting diodes (OLED); and (iii) Determination of thermodynamic and photochemical parameters of organic molecules used as sensors or for optical recording of information by electron spectroscopy. A habilitation thesis on “*Study of the influence of Lewis ligand on the quantum yield of ternary β -dicarbonyl Europium complexes by ultra-fast transient absorption*” are presented, which was developed on the latest publication of the candidate. **Undoubtedly, the scientific contributions of Dr. Stanimirov are original, have significant applied potential and relevance to the thematic area of analysis of complex spectroscopic data.** Thus, the candidate has significantly contributed to the development of the scientific topics of the Laboratory of Molecular Dynamics and Transient Absorption.

2. Educational work

Dr. Stanimirov gives lectures, seminars and exercises in Organic Photochemistry in the Department of Organic Chemistry and Pharmacognosy of FCP from the academic year 2017/2018 until now. In addition, he gives lectures on Organic Chemistry and practical classes on Organic Chemistry I and II at FB.

3. Opinions, notes and recommendations

I do not know Dr. Stanimirov personally, but the presented materials make a good impression on his work and knowledge. The theme of his work is clearly outlined, which is constantly being upgraded. In addition, he has specializations at the prestigious Max Planck Institute for Polymer Research in Mainz, Germany, as well as at Boston College in the United States, which is a good testimonial and evidence that he is a scientist with the ability to conduct independent research.

As a note I will mention that the values of the impact factors of all journals submitted by the candidate in Annex 1 are completely different compare with those in the *WoS* database for the respective year of publication, as well as the presence of self-citations of all authors in the list of the citations.

I would recommend to Dr. Stanimirov to summarize his contributions in a review, which will be important for his future career development, as well as his inclusion as a mentor and supervisor of graduates and PhD-students.

4. Conclusion

Regardless of the aforementioned recommendations, based on the analysis and evaluation of the presented materials, I consider that Dr. Stanimirov is a developed scientist and lecturer, and meet the minimum national requirements as defined in the DASRBA, RIDASRBA, the Rules on the Conditions and Procedure for Acquiring Science Degrees and Holding Academic Positions in SU, as well as with the recommended criteria of the Faculty of

Chemistry and Pharmacy for acquiring the academic position “Associate Professor” at SU in the Professional Field 4.2. Chemical Sciences.

My overall assessment is positive and I would like to recommend to the Faculty Council of Faculty of Chemistry and Pharmacy at SU to support the election of Chief Assistant Professor Dr. Stanislav Stefanov Stanimirov, at the Academic position of “Associate Professor” in the Professional Field 4.2. Chemical Sciences (Organic photochemistry).

02.11.2021

Report prepared by:

Prof. Dr. O. Stoilova

Member of the Academic Jury