СТАНОВИЩЕ

By Associate Professor Yulian Dimitrov Zagranyarski
Sofia University “St. Kliment Ohridski”, Department of Organic Chemistry and Pharmacognoze
on the competition for the occupation of the academic position "Professor" at the Institute of Organic Chemistry with the Center of Phytochemistry (IOCCP) at BAS in the field of chemical sciences, code 4.2. scientific specialty "Organic chemistry" for the needs of the laboratory "Organic Synthesis and Stereochemistry" declared in the State Gazette, issue 89/08.11.2022

1. General presentation of the procedure and the applicant

Documents and materials provided by Assoc. Prof. Svilen Simeonov comply with the requirements for occupying the academic position "Professor" of the Act for the Development of the Academic Staff in the Republic of Bulgaria (ADASRB), the Regulations for the application of the ADASRB, the Regulations for the conditions and the procedure for acquiring academic degrees and for taking Academic positions at BAS and the Regulations for the conditions and procedure for acquiring scientific degrees and for occupying academic positions at IOCCP-BAS.

Assoc. Dr. Svilen Simeonov completed his higher education at the Faculty of Chemistry of the SU "St. Cl. Ohridski" in 2004 as a Master (Organic Chemistry). In 2014, he received the educational and scientific degree "doctor" after defense at the University of Lisbon, Faculty of Pharmacy, on a thesis on "New synthetic methods of biorenewable sources". Since 2014, and currently, works in lab. "Organic Synthesis and Stereochemistry" at IOHTCF-BAS, successively as an assistant (2014), and in 2017, after winning a competition, he was elected as an associate professor. Since 09.2018, he is the project leader of the laboratory "Organic Synthesis and Stereochemistry". There are numerous specializations at leading universities and institutes - University of Vienna (Vienna, Austria), Technical University of Vienna (Vienna, Austria), Institut Superior Technique (Lisbon, Portugal).

2. General characteristics of the applicant's activities

In the competition for professorship, Associate Professor Dr. Svilen Simeonov participated with 5 scientific publications as an equivalent number of publications for habilitation work - indicator C, and with 12 scientific publications under Indicator D, out of a total number of publications - 38, of which 21 are outside the competition for "associate

professor" and his thesis of the scientific and educational degree "doctor". Of the scientific publications presented in the current competition, 16 are in journals of category Q1 (5 according to indicator C and 11 according to indicator D), and 1 is in a journal with Q4 (according to indicator D). Also presented is a list of 901 citations spotted in Web of Science and Scopus; h-index 17.

Results of Assoc. Prof. Simeonov's scientific research (after the competition for "associate professor") have been reported 5 times at national and international scientific forums. Prof. Simeonov actively participates in work on scientific projects - head of 2 national and 4 international projects. Prof. Simeonov is the supervisor of one doctoral student and two successfully defended diploma students. The two prestigious awards won by the candidate should be noted: "Green Chemistry for Life" award for young researchers - 2015, UNESCO, IUPAC; award "Acad. Bogdan Kurtev" 2017-2019 for achievements in the field of organic chemistry.

Thus, Associate Professor Dr. Svilen Simeonov significantly exceeds the minimum requirements of the Regulations of the IOCCP at BAS for occupying the academic position of "professor".

The extended habilitation report is written concisely and clearly with precisely differentiated references to the articles with which the candidate participated in the competition, from those outside it, as well as to the articles on the separate indicators C and D. The scientific developments of Prof. Simeonov entirely fall into the field of organic synthesis and green chemistry, and the contributions are of a fundamental and scientifically applied nature and can be summarized in the following main directions:

- Development of new methods for biorefinery based on biorenewable furan derivatives;
- Synthetic modifications of natural products;
- Others.

As a result of Prof. Simeonov's research, which falls into a modern interdisciplinary field, such as green chemistry, a number of important scientific results have been achieved. The Achmatowicz rearrangement to obtain pentane-1,2,5-triol from furfuryl alcohol (FA) was investigated. An entirely new concept for the preparation of pentane-1,2,5-triol from FA is proposed. The method is characterized by a number of advantages of green chemistry, such as the absence of organic solvents, mild reaction conditions and atmospheric pressure. A new synthetic route for the preparation of bioresorbable monomers and biologically active lactones

was developed using Ru-catalyzed isomerization of the allyl alcohol fragment in the structure of the Achmatowicz's products.

CONCLUSION

The materials provided give me reason to believe that Associate Professor Dr. Svilen Simeonov is a leading scientist in his field with deep knowledge and practical skills. Analyzing the scientific achievements of the candidate, their reviews in the world literature, the relevance and perspective of the topics in his research activity, his active participation in research projects and his personal qualities and skills, I believe that they significantly exceed the requirements of the Act for the Development of the Academic Staff in the Republic of Bulgaria (ADASRB), the Regulations for the application of the ADASRB, the Regulations for the conditions and the procedure for acquiring academic degrees and for taking Academic positions at BAS and the Regulations for the conditions and procedure for acquiring scientific degrees and for occupying academic positions at IOCCP-BAS, and I strongly recommend that the Scientific Board of IOCCP-BAS award to **Assoc. Prof. Svilen Simeonov** the academic position of "Professor" in the field of higher education 4. Natural sciences, mathematics and informatics, professional field 4.2. Chemical Sciences, scientific specialty „Organic chemistry".

13.03.2023 г.

(Assoc. Prof. Yulian Zagranyarski)