

OPINION

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For the concourse for promotion to the academic position "Associate Professor",
announced in **State Gazette**, issue 40 from 16.05.2025

Area of Higher Education: **4. Natural Sciences, Mathematics and Informatics**

Professional Field: **4.2. Chemical Sciences**

Scientific Specialty: **Organic Chemistry**

Candidate: **Senior Assist. Prof. Simeon Stoyanov Stoyanov, PhD**

Review of the presented materials

By Order No. ПД-09-127/2/23.06.2025 of the Director of the Institute of Organic Chemistry with Centre of Phytochemistry (IOCCP) – Bulgarian Academy of Sciences, I have been appointed as a member of the Scientific Jury in a **concourse for the academic position "Associate Professor"** where the only candidate is **Senior Assist. Prof. Eng. Simeon Stoyanov Stoyanov, PhD**.

As a member of the Scientific Jury, I have received:

1. Documents regarding the candidate's participation in the concourse.
2. Copies of the publications submitted for participation in the concourse.

In the presented form, the documents of Simeon Stoyanov fully meet the requirements stipulated in the Act on Development of the Academic Staff in the Republic of Bulgaria (ADASRB), as well as the regulations for its implementation, approved by the Council of Ministers and the IOCCP – BAS.

Short biographic notes

Simeon Stoyanov graduated as M.Sc. in Organic and Analytical Chemistry from the Faculty of Chemistry and Pharmacy at the Sofia University "St. Kliment Ohridski" in 2001. His scientific career began as a PhD student at the IOCCP – BAS (2005-2007) in the scientific specialty "Organic Chemistry", and in the period 2008-2010 he was an Assistant Professor at the same institute. In 2010 he defended a PhD thesis on the topic "Infrared Spectral and Structural Changes Caused by the Conversion of Nitriles into Anions and Radicals" at the IOCCP – BAS and since 2011 to the present he has been a Senior Assistant Professor at the same institute. Simeon Stoyanov's scientific research is of a fundamental and scientific-applied nature in the field of organic chemistry, molecular spectroscopy and quantum chemistry.

Publication and lecturing activities, project participation

For participation in the concourse for promotion to the academic position "Associate Professor", Simeon Stoyanov has presented **26 scientific publications**, of which **6 articles are in journals in quartile Q1, 8 – in Q2, 3 – in Q3, 7 – in Q4 and 2 are in non-refereed editions**. For the last 2 publications (under numbers 3 and 15 in "9 Spisyk s publikacii po pokazatel Г.pdf"), the candidate does not receive points due to the specifics of the field of the concourse, namely Professional Field: **4.2. Chemical Sciences**. I would like to note several inaccuracies in the provided "2 Obrazec_SStoyanov.xlsx": 1) In **Group of indicators "B"**, for the **2nd article in journals in quartile Q2**, no quartile is specified for the corresponding year. Such a quartile (namely **Q2**) is indicated in "8 Spisyk s publikacii po pokazatel B.pdf" and is **verified in WoS**. 2) In **Group of indicators "Г"**, the **3rd publication in journals in quartile Q1 is announced as a publication in a journal in quartile Q2**, while in "9 Spisyk s publikacii po pokazatel Г.pdf" it is announced as a publication in a journal in quartile **Q1**, which is also **verified in WoS**. I also take into account the fact that the **first publication from quartile Q1 in Group of indicators "B"** (according to "2 Obrazec_SStoyanov.xlsx") was presented in the author's summary of the PhD thesis, but at that moment it was under review, which is why **I consider it eligible to be used in this concourse**. I also take into account the fact that the **last publication**

from quartile Q1 in Group of indicators "B" (according to "2 Obrazec_SStoyanov.xlsx") is not presented in its final form, although it was published before the deadline for submitting documents.

Despite the aforementioned inaccuracies in the presented documents, I recognize all publications by Simeon Stoyanov presented for the concourse as fully compliant with the requirements for proven excellence of the scientific publications, as well as strictly relevant to the thematic scope of the concourse. In addition, I would like to point out the fact that Simeon Stoyanov is the single author in one of the publications presented for the concourse, and he is the first author in 7 of the collective works. This fact irrefutably shows the personal input of the candidate in his research developments.

As can be seen from the presented "2 Obrazec_SStoyanov.xlsx", Simeon Stoyanov collects 166 points out of the required 100 points in Group of indicators "B" and 273 points out of a required 220 points in Group of indicators "Г", whereby the candidate not only meets, but also surpasses the requirements of the Regulations for the implementation of ADASRB in IOCCP – BAS.

In "11 Spisyk s citati.pdf" Simeon Stoyanov also presents a list of 119 citations – a sample of all records from the Sonix system. Upon independent verification in Scopus, Simeon Stoyanov has 105 citations (excluding self-citations), which is why I recognize all 119 citations, which bring the candidate 238 points, which again exceeds the minimum required 70 points under Group of Indicators "Д".

Simeon Stoyanov has presented "12 Spisyk uchastiq v proekti.pdf" with participations in 14 projects, 8 of which were funded by the Bulgarian National Scientific Fund. According to "14 Rykovodstvo na diplomanti i specializanti.pdf", Simeon Stoyanov was the supervisor of 1 graduate student for acquiring a master's degree at the University of Chemical Technology and Metallurgy – Sofia in 2018, as well as of specializing students in a summer school organized by the IOCCP – BAS in 2013. Simeon Stoyanov has also presented "10 Uchastiq v konferencii.pdf" – a list of participations with 2 oral presentations and 49 posters at national and international scientific events.

All of the above presents the candidate in the concourse for promotion to the academic position "Associate Professor" Simeon Stoyanov as a competent specialist in the field of organic chemistry, molecular spectroscopy and quantum chemistry.

Analysis of the main fundamental and applied research contributions

Simeon Stoyanov has presented an *Extended Habilitation Summary of Scientific Contributions* on the topic "Application of vibrational spectroscopy to the study of structure and stability of anionic derivatives containing cyano-, carbonyl- and nitro groups. Experimental and theoretical approach". In the *Extended Habilitation Summary*, the candidate presents his scientific research activity as a combined experimental-theoretical approach to the interpretation of vibrational spectra of anionic derivatives, by formulating the difficulties and specifics in measuring experimental IR spectra of anions and radical anions, as well as the challenges in interpreting the obtained experimental results. Simeon Stoyanov has presented results of studies aimed at the prediction of nitrile frequencies and intensities observed in molecules, anions and radicals based on *ab-initio* and density functional theory, as well as the application of density functional theory and solvation models to describe the spectral and structural changes induced by the conversion of substituted benzophenones into ketyl radicals. A large part of Simeon Stoyanov's research activity is in the field of interpretation of vibrational spectra and structures of various organic derivatives, including carbanion derivatives, oxy- and azanion derivatives, as well as of anionic and radicalanionic derivatives of nitroaromatic compounds.

I accept the *Extended Habilitation Summary of Scientific Contributions* presented by Simeon Stoyanov as a reflection of his scientific research activity, noting the fact that it does not reflect all the publications with which the candidate participates in the concourse. Simeon Stoyanov has not formulated scientific contributions and/or contributions of scientific-applied nature, but has presented perspectives for future work. I am convinced in my opinion that the presented results are of essential importance for the development of fundamental research and research of a scientific-applied nature in the fields of organic chemistry, molecular spectroscopy and quantum chemistry. The relatively high number of citations of the research works of Simeon Stoyanov is yet another independent testimony for the quality of the excellent research results achieved with his active participation.

Personal impressions

I have not had the opportunity to meet Simeon Stoyanov in person so far, and I have formed my impressions of the candidate based on his documents for participation in this concourse. Based on them, I believe that Simeon Stoyanov possesses all the necessary qualities to be elected to the academic position of "Associate Professor".

Conclusion

In the formation of the final assessment of the candidate Senior Assist Prof. Simeon Stoyanov for promotion to the academic position "Associate Professor", the requirements of the ADASRB have to be taken into consideration, as well as the regulations for its implementations approved by the Council of Ministers and the specific requirements of IOCCP – BAS. According to the presented documents and their analysis, **Senior Assist. Prof. Simeon Stoyanov meets, and even surpasses, the requirements for the academic position "Associate Professor".**

On the basis of the presented concourse documents and the candidate's publications, which provide visibility of the obtained results, as well as on the basis of the notability of the achieved scientific contributions included thereof, I take the liberty to recommend to the respected members of the Scientific Jury to propose to the respected members of the Scientific Council of the Institute of Organic Chemistry with Centre of Phytochemistry – BAS to vote for the promotion of **Senior Assist. Prof. Simeon Stoyanov Petkov, PhD** to the academic position "Associate Professor" in Professional Field **4.2. Chemical Sciences**, Scientific Specialty **Organic Chemistry**.

September 25, 2025
Sofia

Signature:
(Prof. Tania Pencheva, PhD)