

OPPINION

Regarding the documents submitted by Chief Assist. Prof. Dr. Ivaylo Momchilov Slavchev for the competition for the position of Associate Professor in Professional Field 4.2. Chemical Sciences, scientific specialty Organic Chemistry, for the needs of the "Organic Synthesis and Stereochemistry" Laboratory at the Institute of Organic Chemistry with Centre of Phytochemistry – BAS,

announced in the **State Gazette, Issue 55 of June 16, 2026,**

by Prof. Dr. Rositsa Dimitrova Nikolova,
Faculty of Chemistry and Pharmacy, Sofia University "St. Kliment Ohridski"

The only candidate who applied and was admitted to participate in the competition is Chief Assist. Prof. Dr. Ivaylo Momchilov Slavchev, who works at the Institute of Organic Chemistry with Centre of Phytochemistry at the Bulgarian Academy of Sciences (BAS).

Ivaylo Slavchev earned a Bachelor's degree in Chemistry in 2007 and a Master's degree in Medicinal Chemistry in 2011 from the Faculty of Chemistry at Sofia University. In 2014, he enrolled as a full-time PhD student at the Institute of Organic Chemistry with Centre of Phytochemistry (BAS) under the supervision of Prof. Vladimir Dimitrov, DSc, and with Assoc. Prof. Dr. Georgi Dobrikov serving as a scientific consultant. In 2019, he successfully defended his dissertation titled "Synthetic Transformations of Natural Products."

Between 2007 and 2010, he worked as a technologist at "Yana" AD in the city of Pleven, and during the periods 2013–2014 and 2019–2020, he worked as a chemist at the Institute of Organic Chemistry with Centre of Phytochemistry (BAS). In April 2020, following a competitive selection process, he was appointed as a Chief Assistant Professor at the Institute of Organic Chemistry with Centre of Phytochemistry (BAS), a position he continues to hold.

General characteristics of the received materials and admissibility

Chief Assistant Professor Dr. Ivaylo Slavchev has submitted all documents required by the terms of the competition and fully meets the minimum national requirements, the requirements of the Law on the Development of Academic Staff (LDAS) at the Bulgarian Academy of Sciences (BAS), and those of the Institute of Organic Chemistry with Centre of Phytochemistry (IOCP-BAS).

According to indicator A1: 50 points

According to indicator B4: 130 points

The habilitation report, based on publications submitted in lieu of a habilitation thesis, covers 6 scientific publications—three in Q1, two in Q2, and one in Q3, with a total Impact Factor (IF) of 17.75—all of which are relevant to the subject matter of the competition. Regarding this indicator, the candidate exceeds the minimum requirement of 100 points.

According to indicator D7:

240 points

Under this indicator, the candidate, Chief Assistant Professor Dr. Ivaylo Slavchev, has presented 10 scientific publications as a co-author. All of these have an Impact Factor (total IF 47.193) and are indexed in Scopus and ISI Web of Science; 8 are in Q1 and 2 are in Q2. Among the publications submitted for the competition, Dr. Slavchev is the first author of 3, the second author of 5, and the third author of 2. Nine of the submitted works have an Impact Factor >4, which serves as evidence of the high standard of research conducted within the group where Dr. Slavchev works.

For this indicator, the candidate exceeds the minimum requirement of 220 points.

According to indicator D11:

80 points

40 citations have been documented. In this category as well, the candidate surpasses the requirement of 70 points. Since 2013, Dr. Slavchev has participated in 11 national and 2 international projects. Dr. Slavchev's h-index is 6.

In conclusion, the documents submitted by the candidate meet—and in most cases exceed—the requirements of the Act for the Development of the Academic Staff in the Republic of Bulgaria (ZRASRB) and the regulations for its implementation.

General overview of the candidate's scientific, applied-scientific, pedagogical, and administrative activities

Dr. Slavchev's research focuses primarily on the targeted synthesis of new materials and the systematic investigation of their biological activity. This research is multidisciplinary and holds significant practical value, given the potential application of these materials as biologically active substances, sensors for heavy metals, components for OLEDs, and other advanced technologies. Dr. Slavchev is a co-author of 22 scientific publications; he has 96 citations recorded in international databases and an h-index of 6.

Regarding Dr. Slavchev's pedagogical activities, I could not find any information in the submitted documents concerning the supervision of diploma theses or student internships.

Main Scientific and Applied Scientific Contributions

Dr. Slavchev's research and publications fall within the scientific field for which the competition is announced—organic chemistry. They are of a fundamental and applied nature, focusing primarily on the following areas:

- Development of an optimized, broad-scope protocol for amide bond formation, applicable even to poorly reactive esters and amines. The method utilizes readily available reagents and serves as an eco-friendly alternative to existing laboratory and industrial techniques.
- Synthesis of series of diaryl ethers, along with their sulfur and nitrogen analogs, followed by *in vitro* evaluation of their cytotoxicity and antiviral activity against the viruses PV1, CVB1,

CVB3, HAdV-5, HSV-1, and HCoV-OC43. QSAR analysis was also performed on selected compounds, yielding promising results.

- Synthesis of series of novel camphor derivatives, nitrofuranylamides, and aroylhydrazones, with **in vitro** assessment of their anti-tuberculosis, antimicrobial, and anticancer activities. Studies were also conducted on the cytotoxicity, cell viability, and metabolic stability of specific compounds. Additionally, the anti-oxidant and pro-oxidant activities of natural and semi-synthetic compounds with anti-tuberculosis potential—specifically amides based on a fenchane skeleton—were investigated.
- Design and synthesis of novel materials for advanced technologies, including the investigation of their photophysical properties and potential applications.

I would recommend a more analytical approach when discussing the results in the habilitation report.

Conclusion

In conclusion, I am firmly of the opinion that Chief Assistant Professor Dr. Ivaylo Slavchev meets all the requirements set forth in the Law on the Development of the Academic Staff in the Republic of Bulgaria (LDASRB) and its Regulations for Implementation, as well as the Regulations of the Institute of Organic Chemistry with Centre of Phytochemistry at the Bulgarian Academy of Sciences (BAS), for appointment to the academic position of Associate Professor. Dr. Slavchev's research lies in the field of organic chemistry; he has produced a sufficient number of scientific works—published subsequent to the defense of his dissertation—which have garnered significant recognition in the scientific literature.

Based on the submitted documentation, I confidently recommend that the esteemed Scientific Jury and the Scientific Council of the Institute of Organic Chemistry with Centre of Phytochemistry (BAS) confer the academic rank of "Associate Professor" upon Chief Assistant Professor Dr. Ivaylo Momchilov Slavchev, within Professional Field 4.2: Chemical Sciences, and the scientific specialty of Organic Chemistry.

16.10.2026

Prof. Rositca Nikolova