REVIEWER STATEMENT

by Assoc. Prof. Dr. Nikola Tomov Burdzhiev,
Faculty of Chemistry and Pharmacy, Sofia University "St. Kl. Ohridski"
of the materials submitted for participation in a competition for the academic position of
"**associate professor**"
at the Institute of Organic Chemistry with Centre of Phytochemistry (IOCCP), BAS,
in the area of higher education: **4. Natural sciences, mathematics and informatics;**
professional field: **4.2. Chemical Sciences (Organic Chemistry)**

In the competition for the academic position "Associate Professor", announced in the State Gazette, issue 37/17.5.2022 and on the website of the IOCCP, BAS, as the only candidate participated Chief Assist. Prof. Dr. Yavor Nikolaev Mitrev from the Bulgarian NMR Centre, IOCCP, BAS.

General presentation of the procedure and the candidate

The presented by Chief Assist. Prof. Yavor Nikolaev Mitrev, a set of materials on electronic media is in accordance with the requirements of the Law for the Development of the Academic Staff of the Republic of Bulgaria and the rules for the terms and conditions for acquiring scientific degrees and academic positions at the Institute of Organic Chemistry with the Center for Phytochemistry, BAS (IOCCP, BAS), and meets the criteria of IOCCP-BAS for holding the academic position "Associate Professor".

Dr. Yavor Mitrev has defended a PhD thesis entitled "Synthesis, spectral and chromatographic properties of new 6*H*-6-oxo-dibenzo[c,h]chromenes", which fulfills the criteria of **group A indicators** of the minimum requirements.

For the participation in the competition, the candidate submitted **16 publications**, of which **11** are in journals with **rank Q1**, **2** in journals with **rank Q2**, **2** in journals with **rank Q3** and **1** in a journal with **rank Q4**. All of them correspond to the theme of the competition and do not repeat the articles with which the candidate obtained the educational and scientific degree "doctor". Five of the presented scientific publications are equated to a habilitation work, which collects **112 points** and fulfills the minimum national requirements for the applied position. The remaining 11 scientific works referenced and indexed in world-renowned databases collect a total of **245** points, out of the **required 220**, with which the candidate fulfills and even exceeds the minimum national requirements for the applied position.

Dr. Yavor Mitrev has presented a list of **97** citations in renowned journals, with which the points for **group D indicators** have been fulfilled almost three times compared to the minimum requirements mentioned in the regulations of IOCCP-BAS.

Although it is not noted in the sample report form for the fulfillment of the minimum national requirements and the additional requirements of the IOCCP-BAS, Dr. Mitrev has an h index of 6, which is evident from the curriculum vitae and the list of publications, with which the candidate meets the requirements for the applied position.

Documents certifying the candidate's participation in 9 research projects and 14 scientific forums, with 15 oral or poster presentations, are also presented.

General characteristics of the applicant's activity

The candidate is a co-author of **24 scientific publications**, in three of which he is the first author and/or corresponding author. The overwhelming amount of the articles was published in

journals from the first quarter of the ranking, which is a confirmation to the high quality of Dr. Mitrev's research. The high level of the candidate's scientific output is also confirmed by the large number of citations (135 citations (Scopus), 159 citations (Web of Science)) in renowned journals, among which stand out: *Nature Chemical Biology*, *European Journal of Medicinal Chemistry*, *Journal of Medicinal Chemistry*, *Progress in Nuclear Magnetic Resonance Spectroscopy*, *Molecules*, *etc*.

The overall scientific activity of the candidate is in the field of NMR spectroscopy and its use to solve the modern problems of the structural analysis of individual organic compounds or new materials. Among the most notable scientific results achieved by Dr. Mitrev are the developments of new NMR methods for distinguishing hexabromocyclododecane, widely used as a flame retardant, from more modern bromine-containing polymers with the same properties, and for the obtaining of NMR titration data in water with the use of agar gel and spatially selective one-dimensional NMR experiments. The ability to analyze a large number of samples even in automatic mode makes both methods suitable for implementation in daily laboratory practice. In most of his joint publications, Dr. Mitrev is the only NMR specialist, which is an undoubted confirmation of the candidate's personal contribution in the creation of the relevant scientific works.

The modern NMR equipment recently acquired by IOCCP-BAS, in combination with the candidate's in-depth knowledge, outline the prospects for his future development in the field of liquid and solid-state NMR spectroscopy.

CONCLUSION

The documents and materials as well as the achieved scientific results presented by Chief Assist. Prof. Dr. Yavor Mitrev meet all the requirements of the Law for the Development of the Academic Staff of the Republic of Bulgaria and the Regulations for the Implementation of this law at IOCCP-BAS.

After familiarization with the materials presented in the competition, analysis of the scientific and applied contributions contained in them, as well as on the basis of my personal impressions of the candidate, **I firmly recommend** to the Scientific Jury to prepare a report-proposal to the Scientific Board of IOCCP-BAS for the selection of Chief Assist. Prof. Dr. Yavor Mitrev for the academic position of "Associate Professor" at IOCCP-BAS in the professional field 4.2. Chemical sciences (Organic Chemistry).

12.09. 2022 г. Reviewer:

/assoc. prof. dr. Nikola Burdzhiev/