



МИНИСТЕРСТВО
НА ОБРАЗОВАНИЕТО
И НАУКАТА



БЪЛГАРСКА
АКАДЕМИЯ
на НАУКИТЕ
1869

ASSESSMENT

from Assoc. Prof. Dr. Radoslav Lyudmilov Chayrov – member of scientific jury in the contest for academic position "Associated Professor", announced by IMC-BAS in the state newspaper 95/2023

Regarding: the scientific, scientific-applied and professional-academic activity and production presented by the participants in the contest

The only candidate in the announced contests for the academic position "Associated Professor" announced by IMC-BAS in the state newspaper 95/2023 is Chief Assistant Professor Dr. Rusi Ivanov Rusev. He presents the following documents related to the requirements of the Regulations for application of the act for development of the academic staff of the Republic of Bulgaria:

I. Summarized data for scientific achievements and activity of the candidate

Table 1. Summarized scientific data of the candidate.

A group of metrics	Metric	Points presented/ minimal
A	1. Ph.D. thesis for scientific and educational degree "Ph.D." with title: "Synthesis, structural characterization and antimicrobial activity of quaternary ammonium compounds".	50/50
B	4. Habilitation thesis – scientific publications in journals referred in international scientific database (WoS and Scopus). The candidate presents 4 scientific publications - Q1 . All this metrics give to the candidate 100 points total from the 100 minimal points necessary in this metrics.	100/100
Г	7. Scientific publications in journals referred in international scientific database (WoS and Scopus), out of those for replacing the habilitation thesis. The candidate presents for Г.7. scientific publications, as follow: 3 with Q1 (75 points total), 5 with Q2 (100 points total), 4 with Q4 (48 points total) and 5 in journal with Q4 with SJR (50 points total). All this metrics give to the candidate 273 points total.	273/200

A group of metrics	Metric	Points presented/ minimal
Д	11. Citations in journals, monography, books and patents referred in international scientific database (WoS and Scopus). The candidate Chief Assistant Professor Dr. Rusi Ivanov Rusev is presented 66 citations (attached separate in document "08_Справка на цитиранията") in the journals referred in international scientific database (WoS and Scopus)	66/60

The presented data for participation in the current contest review that Chief Assistant Professor Dr. Rusi Rusev meets and even has more than the requested minimum national criteria for holding the academic position "Associated Professor" and those of the Regulations for the Acquisition of Academic Positions. Currently Dr. Rusev has 21 scientific publications. They are published in various scientific journals and they do not include those for the acquisition of the candidate's "Ph.D." degree. He is participated in 6 national and international scientific forums and he is a part of the teams of 6 scientific projects.

II. Evaluation of the scientific and practical results and contributions of the scientific production presented for participation in the contest

The obtained scientific results make it clear that the X-ray structure analysis is essential part of physicochemical characterization, which reveals and prove the exact location of the atoms, the bonds between them and the spatial orientation of the molecules in the solid state. All publications submitted for participation in the contest are related to the topic of the competition "Structural analysis and physicochemical characterization of small organic molecules". The candidate's scientific results and contributions can be summarized in the following two categories:

- *Structural analysis and physicochemical characterization of organic molecules and application in medicinal chemistry;*
- *Fundamental scientific research containing detailed structural analysis and physicochemical characterization.*

Detailed crystallographic analysis and subsequent comparison of the crystal structures of biologically active/inactive substances is essential, for example in determining the number of hydrogen bonds and their mode of binding in target proteins. This, in turn is key to determining the structure-activity relationship of the investigated substances and provides guidance for the improvement of already known molecules and the development of new molecules.

From all data provided, I can categorically state that Chief Assistant Professor Dr. Rusi Rusev is a well-established specialist in his field. His developments undoubtedly enrich the world database and contribute to the confirmation or clarification of some theoretical structural

studies and molecular docking. All this shows that he has the ability to research, develop and evaluate in the scientific field and the professional direction in which he has chosen to develop.

III. Critical remarks and recommendations

I have no critical remarks and recommendations to the candidate.

IV. Conclusions

The academic development of Chief Assistant Professor Dr. Rusi Rusev is well-deserved and is an integral part of his scientific development at IMC-BAS. The information presented in this opinion gives me the reason for my positive assessment with full conviction regarding the submitted materials for participation in a contest for the academic position of "Associated Professor" from Chief Assistant Professor Dr. Rusi Ivanov Rusev. I believe that he fulfills the minimum national criteria for holding this academic position and has additional contributions from a scientific point of view. In view of all this, I am absolutely convinced that I vote positively for awarding the academic position "Associated professor" in Professional Direction 4.2. Chemical Sciences (Structural analysis and physicochemical characterization of small organic molecules).

20.03.2024 г.

Member of the Scientific jury:

Assoc. Prof. Radoslav Chayrov, PhD