

## **OPIONION**

By Prof. Dr. Eng. Krassimir Georgiev Vassilev, department "Physiology, chemistry and biochemistry" and department "Biotechnology", University "Prof. Dr. Asen Zlatarov"-Burgas, appointed as a member of the scientific jury, according to order No. RD-241/15.09.2022 of the Rector.

on the materials submitted for participation in the competition for the academic position "associate professor", field of higher education 7. Health care and sports, professional direction 7.5 health care, scientific specialty "Pharmaceutical Chemistry", department "Health Care"

The competition was announced by the University "Prof. Dr. Asen Zlatarov"-Burgas and published in the Official Gazette, no. 45/17.06.2022. The only candidate is Dr. Stephan Vanev Kharkov from the Medical College. The review of the documents shows that the procedure for disclosure and announcement of the competition has been followed and the documents have been prepared in accordance with the requirements of ZRASRB, its regulations, the Regulations for the terms and conditions for acquiring scientific degrees and occupying academic positions at the University "Prof. Dr. Asen Zlatarov"-Burgas.

Chief Assistant Dr. Stefan Kharkov completed his master's degree in 2010 at Lviv National Medical University "Danilo Galitsky", Lviv, Ukraine. Received a scientific and educational degree "doctor" in professional direction 7.3 pharmacy, specialty "Pharmaceutical chemistry and pharmacognosy" in 2014 based on a defended dissertation on the topic: "Synthesis and biological activity of thiazolidine derivatives with 2-oxo-1,3 indole fragments in molecules". From 26.09.2016 he held the academic position of "assistant", and from 14.02.2018 he held the academic position of "chief assistant" at the Medical College, department "Health and pharmaceutical care" at the University "Prof. Dr. Asen Zlatarov"-Burgas. As of January 2020, the candidate is the Deputy Director of the Medical College.

Dr. Kharkov participated in the development of seven study programs for the "Pharmacist's Assistant" specialty at the College of Medicine. He took part in the working groups of five scientific projects with the contracting authority NIS, NIHTD fund. The main thing that characterizes Dr. Kharkov is his active research and teaching activity. His average study load for the period 2016-2022 is 566 hours with

a standard of 400 hours. The total number of points according to the relevant indicators for the University are 450 and Dr. Kharkov has 473.

The scientific works that the candidate presents are a total of 25, of which 16 are in publications, referenced and indexed in world-renowned databases with scientific information and 9 in non-refereed journals with scientific review. The candidate has 4 articles as an independent author. He also published an article in the monograph "Chemistry of Heterocyclic Compounds. Contemporary Aspects'. He participated in an international conference held in October 2022 in Greece. The topics to which he has devoted his research work are on obtaining new compounds containing thiazolidine, pyrazoline and isatine fragments, which are current and important for biomedicine.

The essential contributions in this direction can be summarized as follows:

- Synthesis and study of the antioxidant activity of new hydrazide derivatives with significant pharmacological effect. The antioxidant activity was studied *in vitro* in the presence of the stable radical diphenylpicrylhydrazyl;
- Synthesis of new derivatives based on thiazolopyridines with a wide spectrum of biological activity. The resulting compounds were tested on rats and showed a stronger anti-inflammatory effect than the traditionally used diclofenac;
- Analysis of the *in vitro* antitumor activity of thiazolidine derivatives, of compounds containing thiazolidine and pyrazoline fragments and of condensed derivatives with a thiazolothiopyran fragment was performed. The selectivities of the respective compounds were calculated by the selectivity index and compared with known antitumor agents;
- The antimicrobial activity of an infusion of roots and rhizomes of the garden primrose plant on strains of Staphylococcus aureus, Bacillus cereus, Bacillus subtilis, Pseudomonas aeruginosa, etc. was investigated. The experimental results have shown that Garden Charm shows activity and can find application in medical practice.

The main thing that characterizes Dr. Kharkov is his active research and teaching activity. His publishing activity shows that he can work in a team. He is able to work hard and purposefully while being able to generate new research ideas.

My recommendation is that Dr. Kharkov continue to work on the practical application of the obtained results.

## CONCLUSION

The materials presented by Chief Assistant Stefan Kharkov, Ph.D., meets the conditions and requirements provided for in the ZRASRB for occupying the academic position of "Associate Professor". The demonstrated teaching and learning activity convinces me that Dr. Kharkov is a motivated teacher who has potential for future development. After familiarizing myself with the materials presented in the competition, I give my positive assessment of the scientific, research and educational activities of the assistant professor. Dr. Stefan Kharkov and I recommend to the Academic Council that he be elected to the academic position of "Associate Professor" in the scientific specialty "Pharmaceutical Chemistry".

18.11.2022

Jury member:

/ Prof. Krassimir Vassilev, PhD/