

ATTITUDE OF REVIEWER

by Dr. Krasimir Emilov Rusanov – Assoc. Professor at Agrobioinstitute, Sofia, AA

on the materials submitted for the competition

on holding the academic position of "Professor"

at the Institute of Organic Chemistry with the Center for Phytochemistry (IOCCF), BAS

in the field of Natural Sciences, Mathematics and Informatics

in the professional field 4.2. Chemical Sciences, specialty 01.05.10 "Organic Chemistry,
- Chemistry of Natural and Physiologically Active Substances",

1. General presentation of the procedure and the applicant

The only candidate applying for the academic position of "Professor", in accordance with the competition announced in the State Gazette, issue. 43 of May 31, 2019 and on the website of IOCCP-BAS is Dr. Milena Petkova Popova, Associate Professor at IOCCP-BAS, Laboratory "Chemistry of Natural Products".

In relation to the announced competition, the applicant has submitted comprehensive documentation allowing the elaboration of a well-founded opinion regarding the fulfillment of the requirements under the Law on the Development of the Academic Staff in the Republic of Bulgaria (LDASRB) and the Regulations for its application at IOCCP-BAS.

Over the years, the career development of Dr. Milena Popova has been entirely linked with IOCCP-BAS, as evidenced by the submitted CV. After successfully defending her dissertation in 2004, which Dr. Popova developed as a PhD student in freelance training at IOCCP-BAS, Dr. Popova has consecutively held academic positions for a period of 10 years as Research Fellow 3rd degree and Assistant Professor, and since 2014 she is holding the position "Associate Professor". Since 2018, Assoc. Prof. Popova is acting as a Head of the Laboratory "Chemistry of Natural Products" at IOCCP-BAS. Dr. Popova's development as an experienced researcher over the years is evident from the curriculum vitae and the list of scientific publications provided as part of the competition documentation. Dr. Popova is the author of a total of 65 publications

indexed by Scopus with over 1800 citations (Scopus). The examination of the submitted documents in relation to the participation of Dr. Popova in the current competition showed that they reflect correctly the points calculated by the applicant regarding the need to fulfill the scientometric indicators required by LDASRB for holding the academic position of "Professor". It is noteworthy that the applicant's scientometric performance significantly exceeds the national minimum requirements under LDASRB.

2. General characteristics of the applicant's activities

A significant portion (87%) of Dr. Popova's publications submitted for participation in this competition are related to characterization of the composition and biological activity of propolis from Bulgaria and different parts of the world, as the studies conducted over the years have also led to the registration of a utility model for "Water-soluble Propolis Formulation", in which Dr. Popova is listed as a member of the team of inventors. The submitted publications include a wide range of experimental methods in the field of organic and analytical chemistry, including the full range of chromatographic methods for profiling different classes of volatile and non-volatile compounds using gas-, thin layer and liquid chromatography, as well as the application of different methods for fractionation of extracts, isolation of pure substances and NMR for structural analysis. In addition to the wide range of analytical methods, Dr. Popova's publications also show the application of a wide range of methods for determination of biological activity, including antimicrobial activity, antioxidant activity, methods for determination of enzyme activity, as well as analyzes with the application of cell lines.

Dr. Popova is actively involved in national and international research projects and is the leader of two projects under the competition program of the Bulgarian National Science Fund. Although she has not been a PhD supervisor, Dr. Popova has experience as a consultant in the development of a PhD dissertation, as well as a supervisor and consultant in the preparation of diploma works. Over the years, Dr. Popova has actively participated in over 20 international scientific forums, having been a member of the Scientific Committee of four international conferences, and in one case she was a co-chair. Dr. Popova's active research has also been reflected in memberships in a number of organizations and scientific networks such as the Association for Medicinal and Aromatic Plants of Southeast European Countries, the Union of Chemists in Bulgaria, the

International Propolis Research Group at the International Honey Commission and since 2018 Dr. Popova serves as a chairman of the Bulgarian Phytochemical Association.

3. Critical comments and recommendations

The studies presented by Assoc. Prof. Dr. Milena Popova in the form of publications for participation in the competition include detailed characterization of the complex composition of compounds included in propolis samples originating from Bulgaria and different parts of the world, as well as analysis of the different types of biological activities of propolis. As a recommendation to Dr. Popova, with regard to future studies, I would suggest the inclusion of analyzes to determine the species affiliation of the plants contributing to the complex mixture of compounds forming particular propolis samples. Standard DNA barcoding methods and metagenomic approaches routinely used in modern molecular biology can be applied for this purpose.

CONCLUSION

The documents submitted for participation in the competition for holding the academic position of "Professor" at IOCCP-BAS, reveal Assoc. Prof. Milena Popova as an accomplished scientist with a wide range of research abilities and interests. There are substantial scientific and applied contributions in the candidate's scientific papers that fully meet the requirements for holding the academic position of "Professor" in accordance with LDASRB and the Regulations for its implementation at IOCCP-BAS. Based on the above mentioned, I give my positive assessment and recommend to the honorable Scientific Jury to make a recommendation to the Scientific Council at IOCCP-BAS for the election of Dr. Milena Petkova Popova for holding the academic position of "Professor" at IOCCP-BAS.

03.09.2019

Sofia



.....
/Assoc. Prof. Dr. Krasimir Rusanov/