OPINION

by Assoc. Prof. Dr. Petya Koicheva Hristova
Faculty of Biology, Sofia University "St. Kliment Ohridski"
of the materials submitted for the competition
for the academic position of '**Associate Professor**'
at the Institute of Organic Chemistry with the Center for Phytochemistry (IOCCP), Bulgarian Academy of Sciences (BAS)
in the professional field 4.2. "Chemical Sciences"
scientific specialty "Bioorganic chemistry, chemistry of natural and physiologically active substances"

In the competition for 'Associate Professor' announced in the Official State Paper, No 43 of 31.05.2019 and on the website of IOCCP, BAS, as a candidate participates **Alexander Konstantinov Dolashki,** Assistant Professor at IOCCP, BAS.

1. General presentation of the procedure and the candidate

The set of materials presented by **Alexander Konstantinov Dolashki** is in full compliance with the Rules for the Development of the Academic Staff of IOCCP and meets the criteria of IOCCP-BAS for the occupation of the academic position of "Associate Professor". The applicant has applied a total of 50 scientific papers, 4 recognized patent applications, one textbook and one study notebook and a list of participations and leadership of a total of 29 national and international research projects.

The submitted scientific publications, citations and participation in projects significantly exceed the criteria of the Regulations for the acquisition of the academic position of associate professor, since even only 50% of them meet the minimum requirements. The candidate has selected for sections 3 and 4 a total of 24 publications in which the distribution of scientific works by the relevant Q factors is as follows: articles with Q 1 - 7, Q 2 -10, Q 3 -5, Q 4-2 and one article with SJR. Together with the recognized patent applications, the applicant collects only a total of 554 points in these two sections, which unequivocally confirm the high degree of his scientometric performance. The attached materials in the other two sections also exceed the minimum requirements. The total number of candidate points is 1840.

Alexander Dolashki graduated in 2000 as a chemical engineer at the Institute of Chemical Technology and Metallurgy in Sofia, continuing his education at the University of Tübingen, Germany as a full-time doctoral student. In 2005 he acquired a doctor's degree in biochemistry, which determined his professional interests in the coming years. Since 2006 he has been on an employment contract as a assistant professor at the Institute of Organic Chemistry with a Phytochemistry Center in the field of protein and glycoprotein structure and function. The applicant's excellent professional preparation, work with a number of international teams and strong motivation allow the candidate to work out and publish significant scientific achievements.

2. General characteristics of the candidate's activities

Applicant's scientific field is in bio-organic chemistry and all studies are related to the study of the structure and properties of copper-containing proteins and glycoproteins. Alexander Dolashki's scientific contributions can be grouped in two interrelated directions - fundamental and applied. The main fundamental contributions of the conducted researches are directed to isolation and chemical characterization of biomolecules with different number of copper ions (with one copper ion - superoxide dismutase, with two copper ions - hemocyanins and with three copper ions - tyrosinases). Studies on these three models of biomolecules provide information on their complex chemical structure, determine their temperature and pH stability, trace the behavior of native macromolecular complexes and their subunits in the association / dissociation processes, investigate the conditions for the re-formation of isoforms and their conformational stability and etc. All of these studies have important fundamental contributions to the study of complex glycoproteins, but they also reveal a number of their physiological properties as new possibilities to search for potential therapeutic effects. The proteomic analyzes of the antitumor and antimicrobial activity of hemocyanins provide the basis for the development of new medical forms that can replace conventional formulations and antibiotics. Therefore, I believe that all the results presented are in accordance with the scientific specialty of the competition and are in the field of chemistry of natural and physiologically active substances.

The candidate's achievements are reflected in 40 scientific articles published in refereed and indexed international journals. The total impact factor of the candidate from the publications presented in the documents is 80.65, and those with whom he participates in the competition under sections 3 and 4 are respectively IF: 42.42. These data undoubtedly confirm the high scientific value of the presented scientific activity. The quotations of all the works of Dr. Alexander Dolashki, as a reflection of interest and recognition of his research, in the scopus database are a total of 462 by h -14, but the candidate correctly counts only the 225 citations used for the current competition, which determine the index of citation h-10. All quotations noted are from foreign working groups that have extensive research in the field.

As indicated, the applicant does not limit his activity to basic research only and seeks effective implementation of the positive results obtained in practice. This is evidenced by 4 recognized patent applications, such as a new biological product containing hemocyanin, nutritional supplements for the prevention and treatment of gastric diseases, biologically active peptides from rapana hemolymph and biologically active slime mixtures for nutritional supplements and cosmetics. Alexander Dolashki has been awarded with national and international awards for his applied achievements many times (over 18 times) and has participated in trainings of young entrepreneurs in science at the Karol Foundation with high competence and motivation.

3. Conclusion

The documents and materials presented by Alexander Konstantinov Dolashki meet all the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria (LDASRB), the Rules for the Implementation of the LDASRB, the Rules for the Implementation of the LDASRB of BAS and the Regulations of IOCCP-BAS.

The candidate submitted a significant number of scientific papers published after the materials used in the defense of the Doctor 's thesis. The applicant's works have original scientific and applied contributions that have received international recognition as a representative part of them have been published in journals and scientific publications published by international academic publishers. Its theoretical developments have practical applicability. Alexander Dolashki's scientific qualification is convincing and internationally recognized.

The results achieved by Alexander Dolashki in the research activity are fully in compliance with the specific requirements of the IOCCP-BAS Regulations for the application of LDASRB.

After getting acquainted with the materials and scientific works presented in the competition, and after an analysis of their importance and the scientific, scientific-applied and applied contributions, I find it reasonable to give my **positive assessment** and to recommend to the Scientific Jury to prepare a report proposal to the Scientific Board of IOCCP-BAS for the election of Alexander Dolashki to the academic position 'Assistant Professor' at IOCCCF-BAS in the professional field 4.2. Chemical Sciences, scientific specialty "Bioorganic Chemistry, Chemistry of Natural and Physiologically Active Substances.

18.09. 2019

Prepared the opinion: .....

assoc. prof. Petya Hristova