Report

on a competition for academic rank Associate Professor

in the professional field 4.1 Physical Sciences, (Electrical, magnetic and optical properties of condensed matter)

for the needs of Sofia University "St. Kliment Ohridski", Faculty of Physics,

announced in Government Bulletin no. 93 from 26/11/2019

Candidate: Kiril Mladenov Kirilov, PhD, head assistant professor at the Faculty of Physics

Author: Stanimir Todorov Kolev, PhD, associate professor at Faculty of Physics, Sofia
University

Dr. Kirilov's professional career is clearly focused on the research of the properties of new materials with applications mainly in optoelectronics and nanostructures. He completed his university education in "Engineering Physics" at the Faculty of Physics, Sofia Univeristy and later, in 2008, successfully defended his doctoral thesis on "Characterization of semiconductor bulk and nano-structural materials by surface photovoltaic spectroscopy". In 2012, Dr. Kirilov was appointed as an assistant professor at the Faculty of Physics of Sofia University and continues to expand his research with the adoption of various methods for the analysis of solid materials and structures. Between 2006 and 2011, he also had several short one-week specializations abroad.

For this competition, Dr. Kirilov has submitted 16 publications in total, classified as follows:

- 9 publications in peer-reviewed journals with impact factor,
- 7 conference reports, printed in full text.

The number of citations submitted for the competition is 50.

The evidences presented (publications and citations) meets the minimum national requirements. With regard to the requirements of the Faculty of Physics of Sofia University, it should be noted here that the selection of publications and the table of compliance with the requirements of the Faculty of Physics is made on the basis of the officially approved in the beginning of 2020. On the other hand, the competition and the submission of the documents were conducted when the official requirements were still the one from 2013. Due to changes in the laws and the requirements of the Faculty of Physics and, accordingly, the transitional period during which the competition takes place, here I briefly consider the compliance of the presented evidences with the criteria of the Faculty of Physics from 2013 and 2020. With respect to the 2020 criteria, the applicant satisfies the requirements to a great extend with the exception of articles with leading contributions. Only 2 articles can be clearly classified as articles with leading contribution, while the requirement is 4. With regard to the requirements of the Faculty of Physics from 2013, they are considered as

cumulative requirements, i.e. throughout the applicant's career if relevant to the field of competition. Therefore, if only these criteria were taken into account, and if publications that are part of the PhD thesis in the same field are taken into account, the applicant's scientific papers and education experience satisfy the requirements of the Faculty of Physics from 2013, including those for a leading contribution, since some of the articles include experimental studies conducted in Bulgaria.

Applicant's scientific activity is fully relevant to the theme of the contest "Electrical, Magnetic and Optical Properties of Condensed Matter". A short overview of Dr. Kirilov's scientific work shows that he has mastered a wide range of research methods. Dr. Kirilov's organizational experience should also be noted, as he has participated in numerous projects and he was a project leader of one supported by the Scientific Research Fund at Sofia University. My only recommendation is that in the future there should be more works with a leading contribution, i.e. to have more research initiated and presented by him.

In conclusion, I appreciate the achieved scientific results and the research experience of Dr. Kiril Mladenov Kirilov. He has the necessary scientific achievements and qualification for the title "Assistant Professor" in the Faculty of Physics of Sofia University and sufficiently satisfies the requirements of the faculty. Therefore, I propose to the jury to award Dr. Kirilov the title of Associate Professor in the professional field 4.1. "Physical Sciences", scientific specialty "Electrical, magnetic and optical properties of condensed matter".

06.02.2020 г. Report author:

Sofia /assoc. prof. Dr. Stanimir Kolev/