REPORT

On a competition for the academic position of "professor"

In the specialty according to the announcement in State Gazette N12 / 11.02.2020, for a professor in the professional field 4.1 "Physical Sciences"; scientific specialty "Electrical, magnetic and optical properties of condensed matter for the needs of IOMT - BAS

Candidate: George Lalev Dyankov, associate professor, doctor

Reviewer: Kiril Borisov Blagoev, Professor, IFTT-BAS

1.The materials of the only candidate Assoc. Prof. Dr. George Dyankov are presented within the legal term. The documents are presented with the necessary additional evidence. The materials include: 8 articles and reports in full text in scientific journals with IF and SRJ (component V - 147 points); 14 articles and reports in full text in scientific journals with IF and SRJ (component G - 215 points); 5 utility models and patents (component G - 105); 108 citations from other authors (component D - 216 points); management of 2 successfully defended doctoral students (component E - 100 points); participation in national scientific and educational projects (3 pcs.) and attracted funds under them (component E - 44 points); manager of 1 project with DFNI (component E - 20 points); published textbooks and manuals (15 pcs. - component E - 151.7 points).

2. The presented scientific publications (components V and G) are published by Assoc. Prof. G. Dyankov as a single author or co-authored with two or more co-authors. They are published in high-ranking specialized scientific journals - Appl. Optics, Mol. Crystals and Liquid Crystals, Optics and Laser Technology, Optic Communication.

The works of Assoc. Prof. G. Dyankov are mainly in the field of nonlinear optics of various condensed liquid crystal media, as well as on the boundary of media; creation of sensors based on them; nonlinear optics of thin layers; study of laser generation in fibers and in dyes dissolved in polymers.

The present inventions relate to the creation of sensors for different fields of public practice, based on the application of laser radiation with different sensor surfaces or crystals, which change their properties under the influence of the reagent, looking for detection. Devices for recording CO, temperature, current and alcohol, as well as for admission based on biometric data. The proposed devices are fully optical, which has a significant advantage over existing models. Fifteen of the works of Assoc. Prof. G. Dyankov have been cited 108 times by other authors. Two of the papers were cited 10 times and one paper was cited 30 times. It is noteworthy that the citations are in high - ranking scientific journals such as: Appl. Optics, Optics Express, Appl. Phys. Letters, JOSA-B, Phys. Rev, Phys. Rev. Lett., J. of Physics A, B, Opt. Commun. The research projects in which Assoc. Prof. G. Dyankov is a participant or supervisor are with

DFNI and relate to the study of condensed matter, in the case of liquid crystals for the creation and application of sensors and devices for nonlinear optics and biophotonics. The educational activity of Assoc. Prof. G. Dyankov is impressive with the publication of textbooks and teaching notebooks in physics and astronomy for secondary schools. My personal impressions of Assoc. Prof. G. Dyankov are formed by scientific discussions on various topics and it is certain that Assoc. Prof. G. Dyankov is a highly erudite scientist with experience in scientific management of doctoral students, as well as having significant scientific organizational experience.

3. Based on the statement mentioned above, taking into account the scientific metric data (attached table), which exceed those required for selection according to: ZRAS; Regulations for its implementation; The Rules of BAS and the requirements of the Rules for the conditions and procedure for acquiring scientific degrees and holding scientific positions of IOMT - BAS (adopted by the Scientific council of IOMT - BAS on 13.12.2019), as well as the high quality of the presented scientific papers, I support the election of Assoc. Prof. Dr. George Lalev Dyankov for the scientific position of "Professor".

Indicator	Regulation ZRAS	Regulation ZRAS – IOMT-BAS	Type of competition-professor; candidate data
A		50	50
B			
V	100	100	147
G	200	220	320
D	100	120	216
E	150	150	314.9

Sofia, August 12, 2020

Prof. K. Blagoev