

STATEMENT

By competition for the academic position "Associate professor" in natural sciences, mathematics and informatics, professional direction 4.1. Physical Sciences (Physics of Wave Processes) to the Faculty of Physics and Technology, University of Plovdiv "Paisii Hilendarski"

announced in the State Gazette number 96 of November 17, 2023.

with candidate: Anelia Dakova - Mollova, assistant prof. dr.

**by a member of the scientific jury: Assoc. Dr. Albena Tacheva Daskalova,
Institute of Electronics – BAS**

1. General characteristics of the presented materials

The only candidate for the open academic position "associate professor" in professional direction 4.1. "Physical Sciences" and scientific specialty "Physics of Wave Processes" at Paisii Hilendarski University of Plovdiv, Faculty of Physics and Technology, is assistant prof. dr. Aneliya Dakova - Mollova.

The candidate in the competition obtained the scientific and educational degree "doctor" in 2016, defending a dissertation on the topic "Linear and nonlinear optics of femtosecond and attosecond laser pulses" at the Institute of Electronics - BAS, Sofia. In the period from December 2018 - May 2019 and April 2021 - September 2021, Aneliya Dakova Mollova was a postdoctoral student at Plovdiv University "Paisii Hilendarski", Faculty of Physics and Technology, where she worked on the following topics: "The numerical and analytical study of the evolution of narrow-spectrum and wide-spectrum optical pulses in isotropic dispersed media' and 'Nonlinear parametric polarization interaction of light pulses and beams in optical fibers and isotropic materials'.

Assistant prof. dr Aneliya Dakova - Mollova is the co-author of a total of 64 scientific publications, 33 of which are in editions with Impact Factor and 22 with Impact Rank, 9 in refereed and licensed editions, outside international databases. All together 299 citations were noted, 7 of them are outside the international databases, and the h-index is 8. In the competition, she participated with 25 articles, according to criteria B there are 7 articles, of which 6 are in Q2 and one with SJR, according to criterion D- are 18 articles with 1 of them in Q1, 4 of them in Q2, 4 of them in Q3, 1 of them in Q4 and 8 with SJR. All publications are within professional direction 4.1 and the scientific specialty of the competition. The documents are prepared in detail and precision.

From the reference made, it can be seen that the national minimum requirements and the criteria of Plovdiv University "Paisiy Hilendarski", Faculty of Physics and Technology for occupying the academic position "docent" are met in all criteria.

Criteria	Rules of ZRAS	Candidate A. Dakova-Mollova
A	50	50
B	100	130
Г	200	257
Д	50	160
Total:	400	597

Referring to the requirements, conditions and rules of ZRAS, and Plovdiv University "Paisii Hilendarski", Faculty of Physics and Technology, I consider that the quantitative indicators of the criteria for occupying the academic position of "Associate Professor" have been met.

2. General characteristics of the candidate's scientific, and pedagogical activities

The scientific activity of Aneliya Dakova - Mollova is focused towards three main developments: Investigation of the soliton mode of propagation of optical pulses in non-linear dispersed media; Analytical study of four-photon parametric processes and energy exchange between laser pulses and their components in nonlinear dispersive media; Analytical study of the propagation conditions of optical vortex structures in isotropic nonlinear dispersed media.

The publication of results on these topics in journals with a high impact factor and quartile, as well as the large number of noticed citations of the publications, show the relevance and significance of the candidate's contributions.

The scientific activity of dr. Aneliya Dakova - Mollova has been popularized through participation in 28 international and national scientific forums.

Dr. Mollova's project activity is also at a high level. Dr. Anelia Dakova - Mollova demonstrates activity with participation in scientific projects. She participates in one international, 3 national, one of which she is the coordinator, and 4 university projects.

Her pedagogical activity is mainly expressed in teaching and training of students and graduates. She was the supervisor of a total of 18 successfully graduated students, of which 15 for bachelor's degrees and 3 for master's degrees. Electronic lecture courses have been prepared for the students of PU, FTF, on optical communication systems, fiber optics and optical communications, optics, and physics.

In the period of 2010 - 2019, the candidate was awarded 5 awards for the best poster at: 16th ISQE'2010; 17th ISQE'12, Poster session for students during the International Year of Light 2015, Workshop laser and plasma matter interaction 2015, laureate for the prize of Academician Djakov of IE BAS for the best scientific achievement for 2019.

The active organizational activity of the candidate is also impressive. She has been an organizer since 2011 to date of 16 national and 5 international scientific forums.

From 2020 to the present, Dr. Dakova-Mollova holds the position of secretary of the University Commission on Ethics and Academic Unity at PU "P. Hilendarski"; Chairman of the Faculty Committee on Ethics of the Faculty of Physics and Technology at the PU; Academic adviser at the University Center for work with young scientists, doctoral students and postdoctoral students Academia Iuventutis at the PU.

Assistant prof. dr. Dakova-Mollova was also a member of the Jury in the National Competition for students "Physics Engineering-Technology", organized by the Faculty of Physics and Technology of PU "Paisii Hilendarski" in the period 2018-2019, as well as a member of Jury in the competition for "Best Presentation" at the annual student conference of the Faculty of Biology of PU "Paisii Hilendarski", called "Ecology - a way of thinking".

Her activity in public student life is expressed through her participation as a member of the committee on administrative-legal issues, educational and scientific activities at the National

Representation of Student Councils in the Republic of Bulgaria; Deputy Chairman of the Student Council of PU "Paisii Hilendarski" and coordinator of the Committee on Scientific Research, Study and Project Activities at the same organization; Member of the organizing committee of the annual student festival in Plovdiv - OPEN STUDENT FEST; Organizer of the interfaculty competition at PU "P. Hilendarski", called "I know more".

The submitted documents for the competition and their content provide an opportunity for a clear assessment and analysis of the candidate's scientific activity.

Conclusion

My acquaintance with the results of the scientific research activity of dr. Aneliya Dakova - Mollova gives me the believe that the scientometric indicators of the candidate fully cover the requirements of ZRAS and the Regulations of Plovdiv University "Paisii Hilendarski", Faculty of Physics and Technology for the academic "Associate professor" position.

I have no critical comments on the publications and on the documents for the competition.

My personal opinion is that dr. Aneliya Dakova - Mollova is a young researcher with a deep knowledge in her field.

In view of the above-mentioned facts, I express my full support for the candidature of assistant prof. dr. Aneliya Dakova - Mollova, for the academic position of "Associate professor" according to the announced competition.

Based on my familiarity with the submitted materials for the competition, the relevance and significance of the scientific contributions, I convincingly recommend the respected scientific jury, to positively evaluate the scientific works of the competition and propose to the Scientific Council of Plovdiv University "Paisii Hilendarski ", Faculty of Physics and Technology to support assistant prof. dr. Aneliya Dakova - Mollova to become the academic position of "Associate Professor" at Plovdiv University "Paisii Hilendarski", Faculty of Physics and Technology, in professional direction 4.1 "Physical Sciences"

Date: 29.03.2024

Prepared the opinion:

/assoc. prof. A. Daskalova/