

Statement

from

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Member of the scientific jury in a competition for the academic position "Associate Professor" in the professional field 4.2. Chemical Sciences (Biophysicochemistry), announced in SG no. 63 of 30.07.2021. This opinion was prepared on the basis of Order № RD-38-442 / 13.09.2021. of the Rector of Sofia University "St. Cl. Ohridski "and the decision of the scientific jury from a meeting on 08.10.2021.

1. Brief description of the candidate

In the announced competition for associate professor in professional field 4.2. Chemical Sciences (Biophysical chemistry), announced in BG State gazette no. 63 of 30.07.2021, one candidate participates, Ch. Assistant Professor Dr. Nikolay Alexandrov Grozev, Lecturer in the Department of Physical Chemistry, Faculty of Physics and Physics, Sofia University Kliment Ohridski. The candidate meets the requirements for participation in the announced competition, he is a doctor of chemistry, professional field 4.2. Physical chemistry (2003). The candidate is a co-author of 32 publications, 30 of them in refereed and indexed in the SCOPUS database journals, all in the field of experimental physical chemistry of surface phenomena: monolayer approach, liquid and solid thin films, and phase formation in thin polymer films and foams. According to Dr. Grozev's publications, 179 citations and 9 h-index (SCOPUS, 24478254000) were noticed. After 2017, the candidate's publishing activity increased sharply. Dr. Grozev's documents are precisely prepared and complete, meet the requirements of the Regulations of Sofia University "St. Cl. Ohridski and the law.

2. Publication activity data

Dr. Nikolay Grozev participated in the announced competition with a total of 18 publications, all of which were reviewed, 15 of them were in journals, 2 were in conference proceedings and one was a chapter in a series. The total number of citations of these articles is 88. From the attached references it is evident that the applicant exceeds the minimum national requirements under Art. 2b of the Law on Natural Sciences as follows: group of indicators A - 50 points, group of indicators B - 105 points, group of indicators D - 242 points, group of indicators E - 230 points and group of indicators G -190 points. he publications and citations with which Dr. Grozev participates in this competition are beyond those included in his dissertation for obtaining the scientific and educational degree of Doctor in accordance with applicable law. It can be seen that the publication activity data of the candidate exceed the recommended criteria of the FHF of Sofia University "St. Kliment Ohridski" for acquiring the academic position of "Associate Professor", from group of indicators D, E and G.

3. Scientific contributions. Project activity.

The publications submitted for participation in this competition are in the field of surface physical chemistry, most of them have a pronounced focus in biophysical chemistry. Dr. Grozev has published his research in prestigious physicochemical journals with high impact factor: Applied Surface Science, Soft Matter, Colloids and Surfaces A: Physicochemical and Engineering Aspects, Advances in Colloid and Interface Science and others. These are high quality scientific products, as new scientific facts and hypotheses have been published in the fields of surface physical chemistry, biophysical chemistry, phase

formation and monolayers, flotation phenomena. The personal contribution of the candidate in these diverse research fields and author teams is highlighted in the documents presented in this competition. These contributions are experimental physicochemical activities, processing the results of experiments, participation in their theoretical explanation, conceptualization of research, work with PhD students and graduates, participation in writing publications. Knowing the candidate and his precise work, I am convinced of his personal contribution to the presented research. I believe that the role of Dr. Grozev is leading in articles with a focus in biophysical chemistry, while in publications related to sol-gel materials and protective coatings, he participates as an expert in the study of the surface of materials. It is good to note that Dr. Grozev's publishing activity is developed in a wide range of areas such as monolayer kinetics, metal nanoparticles, foams, flotation phenomena and characterization of materials and has been implemented in various research teams.

Dr. Grozev presented for participation in this competition a habilitation thesis entitled "Structure formation in thin polymer films of diblock copolymers and in monolayers of twin molecules derived from L-Asp", written on 104 pages. Scientific work with such volume and depth exceeds the usually submitted papers for participation in a competition for associate professor. The candidate's habilitation thesis is related to "structure formation" in thin polymer films and is based on 5 publications from the period 2007-2020 about new phases in 2D systems. Complex phenomena such as the formation of nonequilibrium crystal phases, duplicates and the presence of morphological instability in the studied systems are discussed. Dr. Grozev's habilitation thesis contains new scientific facts related to summarizing his own results. In my opinion, the morphological approach presented in the habilitation thesis in combination with an in-depth thermodynamic and crystallographic examination is a good basis for future development of the presented scientific facts.

The applicant develops active project activity, participation in international infrastructure projects of FHF such as BeyondEverest and Materials Network as a member of research teams, international research projects such as FineFuture and national projects funded by NSF. Dr. Grozev was also the head of research projects funded by Sofia University "St. Kliment Ohridski".

4. Teaching activities

Dr. Nikolay Grozev is a lecturer in the Department of Physical Chemistry at Sofia University "St. Kliment Ohridski ". His teaching activity is related to exercises, seminars and lectures in physical chemistry for students from FHF and BF at Sofia University "St. Kliment Ohridski". In his teaching activities the candidate is distinguished by precision, combined with a broad general culture in the field of biology and biochemistry.

5. Personal impressions

I have known Dr. Nikolay Grozev for many years as a good scientist, dedicated to his research, having a sense of rightness and critical thinking. We have no joint publications with Dr. Grozev.

6. Recommendations to the candidate

I would recommend to the candidate after his election as an associate professor to intensify his work with doctoral students and graduates, which will be useful for him and for the Laboratory of Biophysical chemistry.

7. Conclusion

Ch. Assistant Professor Dr. Nikolay Alexandrov Grozev meets all the requirements of the Academic Staff Development law in the Republic of Bulgaria for acquiring

the academic position of "Associate Professor" at the Faculty of Chemistry and Pharmacy at Sofia University "St. Kliment Ohridski". The papers presented by the candidate are at a high level and exceed the requirements of the Regulations on the terms and conditions for acquiring the academic position of "Associate Professor" at the Faculty of Chemistry and Pharmacy at Sofia University "St. Kliment Ohridski ". I recommend Ch. Assistant Professor Dr. Nikolay Alexandrov Grozev to take the academic position of "Associate Professor" in the professional field 4.2. Chemical sciences (Biophysical chemistry).



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