

OPINION

by Prof. Dr. Valerij Christov Christov, PhD, DSc
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in regard to the materials submitted for participation in the procedure for *Associate Professor* academic position at the Faculty of Chemistry and Pharmacy at the St. Kliment Ohridski Sofia University

Field of higher education **4. Natural Sciences, Mathematics and Informatics**,
Professional field **4.2. Chemical Sciences**, Scientific specialty **Biophysical Chemistry**

In the procedure for *Associate Professor*, announced in the State Gazette No. 63 of 30. 07. 2021 and on the website of the Faculty of Chemistry and Pharmacy of the St. Kliment Ohridski Sofia University (FCP-SU) for the needs of the Department of Physical Chemistry, as the only candidate is Chief Assistant Professor Dr. Nikolay Alexandrov Grozev from the Department of Physical Chemistry of FCP-SU.

I was appointed by Order No. RD-38-442 / 13. 09. 2021 of the Rector of SU to be a member of the scientific jury within the procedure of occupying the academic position *Associate Professor* in the field of higher education 4. Natural sciences, Mathematics and Informatics, professional field 4.2. Chemical Sciences, scientific specialty Biophysical Chemistry for the needs of the Department of Physical Chemistry of the FCP-SU.

The set of electronic materials submitted is in compliance with the the Regulation on the Terms and Procedure for Acquisition of Academic Degrees and the Occupation of Academic Jobs at SU and includes all administrative and scientific documents necessary for the procedure.

General Information on Applicant's Activity

The candidate Chief Assist. Prof. Dr. Nikolay Grozev has presented a total of 32 scientific publications, 28 of which are referenced and indexed in Scopus, and 5 of the articles are included in the dissertation for obtaining the educational and scientific degree of *Doctor*.

The total number of publications with which Dr. Grozev participated in the procedure for *Associate Professor* and which were published after the acquisition of ONS *Doctor* (2003) is 18, all of which are referenced and peer-reviewed. There are 15 articles published in journals, 2 are in conference proceedings and 1 is a chapter in a series. The total number of citations of these articles is 88. The articles in journals with quartile Q1 are 7 pcs., with Q2 - 4 pcs., with Q3 - 4 pcs., with Q4 - 1 pc. and two articles are in journals with SJR. Articles that provoke interest are published in journals with excellent reputation such as *Advances in Colloid and Interface Science* [two articles, Q2, IF (2013) = 3,922; Q1, IF (2019) = 10,817], *Colloids and Surfaces B: Biointerfaces* [Q1, IF (2013) = 4,740], *Soft Matter* [Q1, IF (2008) = 4,433], *Journal of Physical Chemistry B* [Q1, IF 2012) = 3,868], *RSC Advances* [Q1, IF (2019) = 3,267], *European Physical Journal E* [Q1, IF (2008) = 1,888], *Applied Surface Science* [Q1, IF (2008) = 1,746], *Colloids and Surfaces A: Physicochemical and Engineering Aspects* [two articles, Q2, IF (2018) = 3,319], *Minerals* [Q2, IF (2020) = 2,508] and others.

Dr. Grozev has presented an extensive (104 pages) habilitation thesis, including part of his research. It is based on five of his original scientific papers and the works of other authors and is dedicated to research on the formation of textures in thin polymer films of diblock copolymers and in monolayers of twin molecules derived from L-Asp.

Dr. Grozev has experience working on various projects. He was the leader of two projects and a member of the working teams of two projects funded by the NIS of Sofia University. He has also participated as a member of the working teams developing two Horizon 2020 projects, three FP7 projects and five projects funded by the National Research Fund.

From the attached reference for the workload it is evident that Dr. Grozev has an active teaching activity, which includes preparing and conducting lectures and laboratory exercises in a number of physicochemical disciplines for students of Bachelor's degree in the FCP and the Faculty of Biology. Dr. Grozev was the research supervisor of a student's thesis, which was successfully defended (2005).

A list of 15 participations in scientific forums is presented, for which the candidate has presented only the lecturer, the type and title of the report. Other information about the participation in the forums is not presented. It would be good to provide information about the authors of the reports (for two of the participations there is this information), the type of presentations - oral reports or poster participations, as well as the type of scientific forum - international, national or university.

Scientific Contributions and Citations of the Candidate

The research activity of the candidate corresponds to the direction of the announced procedure. Dr. Grozev's main research interests and contributions are in the field of surface physical chemistry and colloid chemistry and are generally focused on the study of phenomena occurring at the phase boundaries and the adsorption of surfactants such as the water/air interface, thin films, solid films on solid substrates, liquid films on solid and liquid substrates. The presented self-assessment of the contributions in the scientific works of Dr. Grozev reflects in detail and precisely the main conclusions in his publications.

The scientific results obtained by Dr. Nikolay Grozev have been reflected in the chemical literature and in connection with them 115 citations of 15 articles (h index 6) have been noticed. The following articles differ in the number of citations: *European Physical Journal E*, **2008** - 28, *Lecture Notes in Physics*, **2007** - 20, *Colloid and Polymer Science*, **2002** - 13, *Advances in Colloid and Interface Science*, **2019** - 11 pcs., *Colloid and Polymer Science*, **1999** - 9 pcs., *Colloids and Surfaces B: Biointerfaces*, **2013** - 7 pcs. and others. In my opinion, it is completely unnecessary to present the total number of citations with auto-citations (171), as well as the number of citations with auto-citations of all co-authors (163).

Assessment of the Personal Contribution of the Candidate and Personal Impressions

The personal contribution of the candidate in the developed topics and publications is undoubted and significant. The presented reference for the scientific contributions correctly summarizes the performed activity and reflects the achieved scientific results as the individual contribution of Dr. Grozev in each of the subtopics is noted extremely precisely and correctly.

I do not know personally Dr. Nikolay Grozev, but judging by his scientific publications, no doubt, he has a very good theoretical and experimental training, based on which I can conclude that they were productive in the implementation of his research work. The scientific publications and other materials on the competition leave excellent impressions for his business and professional qualities and characterize Dr. Grozev as a purposeful, hard-working and tolerant colleague with original scientific ideas and capacity for their realization.

Dr. Nikolay Grozev fully corresponds to my idea of an *Associate Professor*, both with his knowledge, competence and erudition, and with his attitude to research and teaching.

Critical Remarks and Recommendations

I have no critical remarks to the presented materials, with which the candidate participates in the procedure for *Associate Professor*, as well as to his significant scientific activity, presented for participation in the procedure. On the contrary, I would like to express my satisfaction with the orderliness, completeness and precision of the submitted materials, which fully meet the requirements of the Law on its implementation and are an illustration of the overall excellent impression of the creative performance of the candidate. The documentation for the competition is well completed and arranged, which greatly facilitates the work of the members of the scientific jury.

I would like to recommend a more active participation of Dr. Nikolay Grozev in attracting students to research work through scientific guidance of students and graduates and especially in his engagement as a research supervisor in the doctoral program in physical chemistry.

CONCLUSION

The documents and materials submitted by Chief Assist. Prof. Dr. Nikolay Grozev, meet all the requirements of the Regulations on the terms and conditions for obtaining scientific degrees and holding academic positions at Sofia University. The candidate in the procedure has submitted a sufficient number of scientific papers published after the acquisition of ONS *doctor*. In the works of the candidate there are significant scientific contributions in the field of physical chemistry of surfaces and colloid chemistry, which have received international recognition. The scientific and teaching qualification of Dr. Nikolay Grozev is undoubted and highly appreciated. The results achieved by him in the research and teaching activities meet the specific requirements adopted in the Recommendations for the criteria for acquiring scientific degrees and holding academic positions at Sofia University for the professional field Chemical Sciences.

After getting acquainted with the materials and scientific papers presented in the procedure, analysis of their significance and the scientific contributions contained in them, I find it reasonable to give **my positive assessment** and confidently recommend the Scientific Jury to prepare a report-proposal to the Faculty Council of FCP-SU to elect **Chief Assistant Professor Dr. Nikolay Alexandrov Grozev** to the academic position of *Associate Professor* in the Department of Physical Chemistry of FCP-SU in the professional field 4.2. Chemical sciences, scientific specialty Biophysical chemistry.

10. 12. 2021
Sofia

Member of the Scientific Jury:
(Prof. Dr. Valerij Christov, PhD, DSc)