

STATEMENT

in a competition for the academic position of “Associate Professor” in the professional field 4.1. Physical sciences (Probabilistic analysis in nuclear technologies), for the needs of Faculty of Physics, Sofia University “St. Kliment Ohridski”, announced in the State Gazette, № 48/ 28.06.2022

**Member of the Scientific Jury: Assoc. Prof. Ralitsa Zhelyazkova
Stanoeva, PhD, SWU “Neofit Rilski”**

*Subject: the scientific, scientific-applied and professional-academic activity and production, presented by the only candidate in the competition **Dr. Gueorgui Ivanov Petkov**.*

1. Summarized data of the scientific production and the activity of the candidate.

The only candidate for this competition graduated from the Moscow Power Engineering Institute, Russian Federation in 1986 as a MSc in Nuclear Engineering. In 1992 he defended his dissertation for the scientific and educational degree “Doctor” on the topic “Development of techniques and algorithms for modeling and analysis of the reliability of NPP systems”. From 2006 to 2014 he was an Associate Professor at the Technical University – Sofia. Currently, Dr. Petkov holds the position of Chief Expert, “Probabilistic Safety Analysis” at Kozloduy NPP.

1.1. Related to teaching activities.

The work experience of Dr. Gueorgui Petkov in the specialty is over 30 years, of which about 23 years were as a teacher. The candidate is a former lecturer in the Department of Thermal and Nuclear Power Engineering, “Faculty of Power Engineering and Power Machines” of the Technical University of Sofia. He worked from June 01.10.1995 as a chief assistant and from 04.06.2006 to 02.01.2014 he was an Associate Professor. Over the years as a teacher, Dr. Petkov has lectured and/or led exercises on compulsory and optional disciplines related to nuclear energy. In general, the candidate's teaching activity is intensive. According to this indicator, Dr. Gueorgui Petkov fully meets the requirements for occupying the academic position of “Associate Professor”.

1.2. Related to scientific work and achievements.

The scientific developments with which the candidate participated in the competition are presented in 45 publications. It should be noted that these are not all the publications of Dr. Gueorgui Petkov. The complete list of all publications is attached to the applicant's documents, but only the specified 45 publications are subject to review. Of these, 17 scientific publications are not indexed in the international databases Scopus and/or Web of Science. Since, in the professional field 4.1 Physical Sciences are considered only scientific works that are published in international journals, referenced and indexed in the mentioned international databases, the subject of review are the remaining 28 developments. In 24 of these publications, the candidate is the first author. Based on this, I take it that he has made a significant contribution to the research presented. The candidate has also submitted a list of 46 noticed independent citations of his scientific publications, of which 25 are indexed in international databases. Dr. Petkov is a member of the scientific teams of three research projects, one of which he is the head of.

Dr. Gueorgui Petkov's scientific interests and achievements are related to the development of methods for modeling, research, evaluation and analysis of the reliability and risk of complex dynamic systems with human participation; modeling, evaluation and analysis of context, knowledge, communication and decision-making under normal and emergency conditions of human-machine systems such as NPP. In summary, the scientific activity of Dr. Gueorgui Petkov meets all expectations and requirements for the academic position of "Associate Professor".

2. Analysis of the presented materials.

The above allows me to conclude that the teaching and scientific experience and scientific production of Dr. Gueorgui Petkov meets the minimum national requirements for occupying the academic position "Associate Professor", accepted with "The Rules for Implementing the Law on the Development of the Academic Staff in the Republic of Bulgaria" on February 19, 2019.

Group	Indicator	Requirements	Applicant's indicators
Group A	Indicator 1	min. 50 points	scored 50 pts
Group B	Indicator 3 or 4	min. 100 points	scored 100 pts (from Ind. 4)
Group Γ	Indicators 5-10	min. 200 points	scored 220 pts (from Ind. 7)
Group Д	Indicator 11	min. 50 points	scored 50 pts

3. Critical remarks and recommendations

I would like to recommend the candidate to have a more responsible attitude towards the preparation of his documents. For example, the file 10B.Selected-PublicationsList.pdf was filled in incorrectly.

4. Conclusion

After getting acquainted with the scientific works, with the scientific and scientific-applied contributions contained in them, I give a positive assessment of the scientific production of Dr. Gueorgui Petkov.

Based on the quantitative and qualitative analysis, I believe that the candidate meets the minimum national requirements for holding the academic position of “Associate Professor” and therefore I recommend the scientific jury to propose to the Faculty Council of the Faculty of Physics of Sofia University to choose Dr. Gueorgui Petkov for the academic position “Associate Professor” in professional field 4.1. Physical Sciences (Probabilistic analysis in nuclear technologies).

10.11.2022 г.

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(Assoc. Prof. Ralitsa Stanoeva)