

STATEMENT

Competition for an academic position

"associate professor"

in Subject classification 4.5. Mathematics (Ordinary differential equations, Hamilton systems and applications)

for the needs of Sofia University "St. Kliment Ohridski" (SU),

Faculty of Mathematics and Informatics (FMI),

announced in SG no. 56 of 30.06.2023 and on the FMI and SU websites

Author: **Assoc. Prof. Dr. Georgi Petrov Boyadzhiev**, with affiliation Institute of Mathematics and Informatics, Bulgarian Academy of Sciences, given as a member of the scientific jury for the competition for academic position "Assoc. Prof", Subject classification 4.5. Mathematics (Ordinary differential equations, Hamilton systems and applications), announced in State Gazette, no. 56 of 30.06.2023 , according to Order No. RD 38-514/29.08.2023. of the Rector of Sofia University.

Two candidates have submitted documents for participation in the announced competition:

1. Senior assistant Prof. Dr. **Georgi Ivanov Georgiev**, with affiliation Sofia University "St. Kliment Ohridski"
2. Senior assistant Prof. Dr. **Svetlin Georgiev Georgiev**, with affiliation Sofia University "St. Kliment Ohridski"

Senior assistant Prof. Dr. Georgi Ivanov Georgiev has deposited a request of withdraw for his application for this competition. Therefore the statement has been given only for the other candidate.

I. General description of the presented materials

1. Application details

The documents submitted by the candidate for the competition correspond to the legal requirements in Bulgaria and the Regulations for the terms and conditions for acquiring scientific degrees and occupying academic positions at SU "St. Kliment Ohridski".

Applying for the competition, the candidate Senior Assistant Professor Svetlin Georgiev Georgiev presented a list of 10 titles in total including one in foreign scientific journal and scientific forums and 9 monographs. 9 quotations are presented. Two other documents (in the form of official notes and certificates from an employer) supporting the applicant's achievements are also given.

Notes and comments on the documents: The set of documents contains all those required by the national legislation of the Republic of Bulgaria.

2. Applicant data

Senior Assistant Professor Dr. Svetlin Georgiev Georgiev was born in 1974 in Ruse. Married, with five children. He received his scientific and educational degree "doctor" (Ph.D) in 2002. The publication that was used to obtain PhD is not included in the titles submitted for this competition.. Author of 15 scientific monographs and 49 scientific articles. Currently, the Senior assistant t in the department "Differential Equations" of the FMI, SU.

3. General characteristics of the candidate's scientific works and achievements

3.1 The main topic of the articles that Dr. Georgi Ivanov Georgiev presents for the competition is the problem of integrability or non-integrability of systems of ordinary differential equations arising in physics. Such are the problems for trapped ions, for geodesic motion near a system of two or more compact objects, described by the model of Chazy-Curzon, etc. In the most recent work by publication date, the problem of existence of solutions of nonlinear partial differential equations is studied. Three of the presented articles are co-authored and five are independent research. The scientific articles submitted for participation in the competition are comprehensibly written, show the author's in-depth knowledge of the considered problems in the field of integrability of differential equations, and last but not least - the author's scientific contribution in the relevant field is visible. Therefore,

- a) the scientific works presented by Dr. Georgi Ivanov Georgiev fully meet the minimum national requirements (according to Art. 2b, paras. 2 and 3 of ZRASRB) and, accordingly, the additional requirements of SU "St. Kliment Ohridski" to occupy the academic position of "associate professor" in Subject classification 4.5. Mathematics (Differential equations);
- b) The scientific works presented by the candidate do not repeat those from previous procedures for acquiring a scientific title and academic position.
- c) After a careful review of the scientific publications provided to the candidate and a thorough reference to the literature, no evidence of plagiarism was found in the scientific works submitted for the competition.

3.2 Senior assistant Dr. Svetlin Georgiev Georgiev participated in the competition with 1 publication in a foreign scientific publication and 9 monographs. In the paper is given a generalization of Krasnoselski's fixed point theorems for the sum of two operators that may not be compact and continuous. The paper is written at a very good scientific level, with a clear emphasis on the new elements in the article, which also has very good scientometric indicators. In the monograph presented by point B, integral equations are studied from the point of view of the unified approach for studying

differential and integral equations, called "time scales calculus". The monograph is well written, with high scientific and educational value. Therefore,

- a) the scientific works presented by Dr. Georgi Ivanov Georgiev fully meet the minimum national requirements (according to Art. 2b, paras. 2 and 3 of ZRASRB) and, accordingly, the additional requirements of SU "St. Kliment Ohridski" to occupy the academic position of "associate professor" in Subject classification 4.5. Mathematics (Differential equations);
- b) The scientific works presented by the candidate do not repeat those from previous procedures for acquiring a scientific title and academic position.
- c) After a careful review of the scientific publications provided to the candidate and a thorough reference to the literature, no evidence of plagiarism was found in the scientific works submitted for the competition.

4. Characteristics and assessment of the candidate's teaching activity

Dr. Svetlin Georgiev Georgiev did not submit an officially issued certificate of teaching employment, from which it is evident that he covers the minimum norm of 360 hours.

5. Content analysis of the candidate's scientific and scientific-applied achievements contained in the materials for participation in the competition

Dr. Svetlin Georgiev Georgiev: The available texts are written at a high scientific level. The article is one of good quality and contains original contributions. Apart from the competition materials, Dr. Svetlin Georgiev Georgiev has a good publication activity - 49 scientific articles and 15 monographs, some of them with good scientific results and scientometric data.

6. Critical notes and recommendations

I have no critical comments to the candidate on the reviewed works regarding: staging; analyzes and summaries; methodological level; accuracy and completeness of results; literary awareness.

7. Personal opinion to the candidate

I have no personal impressions of the candidate. My opinion is formed only by the documents provided for the competition.

8. Application conclusion

After I have got acquainted with the presented by Dr. Svetlin Georgiev Georgiev materials and scientific works and based on the analysis of their significance and the scientific and scientific-applied contributions contained in them, I do confirm that the scientific achievements meet the requirements of ZRASRB, the Regulations for its application and the relevant Regulations of SU "St. Kliment Ohridski" for the candidate to occupy the academic position of "associate professor" in the

scientific field and professional direction of the competition although the main subject of the candidate is partial differential equations. No plagiarism was found in the scientific works submitted for the competition.

I give my **positive** assessment to the application.

II. GENERAL CONCLUSION

Based on the above, I recommend the scientific jury to propose to the competent authority for the selection of the Faculty of Mathematics and Informatics at SU "St. Kliment Ohridski" **to elect** senior assistant professor Dr. Svetlin Georgiev Georgiev to take the academic position of "associate professor" in Subject classification 4.5. Mathematics (Ordinary differential equations, Hamilton systems and applications)

11.07.2023

Author:

(**assoc. prof. Georgi Boyadzhiev**)