OPINION

on a competition for election on the academic position

„Associate Professor"

in professional area 4.5 Mathematics

(Ordinary Differential Equations, Hamiltonian systems and applications),

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

Faculty of Mathematics and Informatics (FMI),

announced in SG issue 56 from 30.06.2023 and on the web-pages of FMI and SU

The opinion is prepared by: **Prof. Stanislav Nikolaev Harizanov PhD,**

Institute of Information and Communication Technologies at BAS,

as a member of the Scientific Jury under the procedure, appointed by

Order № RD 38-520/29.08.2023 of the Rector of the Sofia University.

For participation in the competition, **the following candidates** initially applied:

- **Asst. Prof. Dr Svetlin Georgiev Georgiev**
- **Asst. Prof. Dr Georgi Ivanov Georgiev**

Due to a declaration by Asst. Prof. Dr Georgi Ivanov Georgiev, submitted and approved by the Rector on 14.09.2023, the applicant withdrew his documents for participation in the competition, because he had already been elected as an Associate Professor in professional area 4.5 Mathematics (Differential Equations) within the competition, announced in State Gazette issue 24 from 17.03.2023.

Thus, it remained to be considered the application of the **sole candidate:**

Asst. Prof. Dr Svetlin Georgiev Georgiev, FMI-SU

I. General description of the submitted materials

I received all the necessary documents, attached to the application, in an electronic format.

1. Information on the Application

Based on the submitted documentation, it is **not possible to be determined** with certainty whether the application is in accordance to ADASRB, RAADASRB, and the Rules on the Conditions and Procedure for Acquiring Science Degrees and Holding Academic Positions in Sofia University "St. Kliment Ohridski" (RCPASDHAPSU).

For participation in the competition, the applicant Asst. Prof. Dr Svetlin Georgiev Georgiev has presented a list of 10 papers in total, including 1 article in an international scientific journal with IF, 1 monograph in English, referenced and indexed in Scopus, 8 books in English, published by

international scientific publishing houses. There have been presented a couple of additional documents (in the form of work notifications and certificates by an employer) in support of the applicant achievements. A list of 8 independent citations by publications indexed in Scopus has also been submitted.

Remarks and comments on the submitted materials:

Overall, the materials are not gathered in a nice way, which makes the verification of satisfying the minimum bounds for the majority of the necessary criteria difficult. A private check in the world renowned scientific information databases (Web Of Science / Scopus) indicates very high overall scientific metrics for the applicant: 57/138 indexed publications, and an h-index of 6/7, respectively. Based on that, he undoubtedly fulfills by far all the criteria for the procedure. The submitted materials, however, do not correspond to the above standards and they cover a small part of his research activities. In addition, they contain several technical mistakes. For example, the article C4:

- T. Xiang and S. Georgiev. Noncompact-type Krasnoselskii fixed point theorems and their applications. MMAS, Vol. 39, Issue 4, 2016, pp. 833-863.

is documented as Q1, but during the year of publication (2016), the Journal *Mathematical Methods in the Applied Sciences* is ranked Q2, according to *Clarivate*. Therefore, the sum of the points in group C of indicators is in fact 160, not 175. Furthermore, citations E6 and E8 coincide, thus the number of independent citations is reduced to 7 and the points in group E of indicators is reduced to 56, which however remains above the critical minimum of 50 and does not play a significant role on the application admissibility.

I find it very difficult to determine if the minimal criteria in the group of indicators D is indeed fulfilled. In the submitted reference table, the candidate has indicated that the presented 8 scientific publications should be referred to indicator D7: "Scientific publications in editions, referenced and indexed by the world renowned scientific information databases (Web Of Science/Scopus/etc.)" and he has evaluated each of them by 30 points, meaning that they are considered as „publications with SJR, but without IF". But those are books, and they do not posses an SJR! If we consider them as "other publications" their points should be reduced to 18 per book and then the sum of points in group G of indicators is reduced to 8x18=144, which is below the critical minimum of 200. Assuming that there is another technical mistake and the correct relation is the indicator D5: „Published monograph", then we have to apply the definition of a monograph according to the additional clauses of ADASRB (SG, issue 30 from 2018, applicable from 04.05.2018), namely „*a monograph is a scientific publication, which neither repeats nor generalizes existing scientific knowledge*". There are no proofs/arguments provided by the candidate that those 8 manuscripts indeed satisfy the above definition. Moreover, in the titles/abstracts of the majority of the books appear the words: "introduction" and/or "foundation", while in their list of references there are practically no scientific publications, authored or co-authored by Dr. Svetlin Georgiev. Hence, I do

not have the necessary information to decide if those are indeed monographs in the sense of ADASRB.

2. Short biographical information

Dr. Svetlin Georgiev was born in Rousse on 05.04.1974. He has a Bulgarian-French nationality. Married with 5 children. In 1997 he graduated from the University of Veliko Tarnovo, majoring in „Mathematics and Informatics", while in 2002 he successfully defended a PhD degree in Mathematics. The title of his thesis is "Positive periodic solutions of some non-autonomous Lotka - Volterra systems" and his PhD advisor is Asc. Prof. Dr. Dimiter Petrov. On 01.10.2002 he started to work as an "Assistant" at the Department „Differential Equations" in FMI-SU, while since 01.04.2011 he has been working as an "Assistant Professor" at the same department.

3. General characteristics of research and scientific achievements of the candidate

According to the reference of Dr. Svetlin Georgiev, generated by the system „Authors"-FMI, SU, the candidate authors/co-authors 49 scientific publications and 16 books. He participated in 46 scientific conferences. His main research interests are within the fields of: Iso-Mathematics; Ordinary, Partial, and Stochastic Differential Equations; Mathematical Modeling and applications.

a) it is **not possible to be determined** with certainty if the scientific publications are in accordance with the National criteria (i.e., 2-nd and 3-rd subparagraphs of Article 2b of ADASRB), respectively the additional requirements of SU "St. Kliment Ohridski" for receiving the academic position „Associate Professor" in the scientific specialty and professional area of the current procedure;

b) the presented scientific publications **do not coincide** with publications from previous completed procedures by the candidate for receiving a scientific title or an academic position;

c) **no** plagiarism has been proved in a legal way within the presented scientific publications for the current procedure.

4. Characterization and evaluation of the applicant's teaching activities

There is no submitted official receipt, regarding the teaching activities of the candidate. Neither a list of courses, taught by the candidate during the last 5 years. It is not clear if the required minimal teaching workload of 270 academic hours (according to the 2-nd subparagraph of Article 86 of RCPASDHAPSU) is achieved.

5. Detailed analysis of the applicant's scientific and applied scientific achievements, contained in the submitted application for the current procedure

Asst. Svetlin Georgiev participates in the competition with 1 journal article and 9 books/monographs. All publications are written at a high scientific level. The article is published in a strong international journal (almost in the WoS top 10% as of 2022), contains original scientific contributions, and 12 independent citations have been documented in Scopus so far. Applying noncompact-type Krasnoselskii fixed point theorems, the authors study the existence and/or

uniqueness of solutions for: a class of transport equations; a class of Darboux problems on the first quadrant; a class of difference equations; some kind of perturbed Volterra-type integral equations. The books are of good pedagogical value and could be used for teaching BSc, Msc, PhD students.

6. Critical remarks and suggestions

Overall, the materials are not gathered in a nice way and contain several technical mistakes.

7. Personal impressions

The applicant was teaching me „Partial differential Equations" in 2003. With respect to his teaching, my impressions are positive.

8. Conclusion on the application

After I got acquainted with the presented materials and scientific publications for the competition and based on the conducted analysis on their scientific impact and the scientific and applied scientific contributions they contain, I **do not confirm** that his scientific achievements are in accordance to the requirements of ADASRB, RAADASRB, and RCPASDHAPSU for receiving the academic position „Associate Professor" in scientific specialty "Ordinary Differential Equations" and professional area 4.5 Mathematics. In particular it **can not be clearly determined** whether the candidate fulfills the minimal national criteria in professional area 4.5. Mathematics, while no plagiarism in the presented publications has been documented.

I give a **negative** evaluation for the application.

II. GENERAL CONCLUSION

Given the above, I wish to **not propose** to the Scientific Jury to make a recommendation to the Academic Council of the Faculty of Mathematics and Informatics at the Sofia University "St. Kliment Ohridski", Asst. Prof. Dr Svetlin Georgiev Georgiev to be elected for the academic position "Associate Professor" in professional area 4.5 Mathematics, scientific specialty "Ordinary Differential Equations (Hamiltonian systems and applications)".

27.10. 2023   Member of the scientific jury: ....

(Prof. Stanislav Harizanov, PhD)