OPINION

Regarding: Competition for occupation of the academic position of "Associate Professor" in higher education field 4. "Natural Sciences, Mathematics and Informatics", professional line 4.4. "Earth Sciences", scientific major "Remote Sensing of the Earth and Planets", as promulgated in the State gazette, issue 98 of 13.12.2019 for the needs of the "Remote Sensing and GIS" Department of the Space Research and Technology Institute of the Bulgarian Academy of Sciences (SRTI–BAS), with only one Applicant, Chief Assist. Prof. Dr. Alexander Gikov.

Opinion prepared by: Dr. Eugenia Roumenina, Professor at SRTI–BAS in higher education field 4. "Natural Sciences, Mathematics and Informatics", professional line 4.4. "Earth Sciences", scientific major "Remote Sensing".

General presentation of the procedure

The Opinion was prepared while implementing Order No.16/24.01.2020 of the Director of SRTI–BAS, a decision on the procedure of the Scientific Jury (Protocol No.1/14.02.2020), and in accordance with the requirements of the Act on Development of the Academic Staff in the Republic of Bulgaria (ADASRB), the Enforcement Rules of ADASRB and the Rules on the Terms and Conditions for Acquisition of Scientific Ranks and Occupation of Academic Positions in BAS and SRTI–BAS.

Within the lawful two-month term for participation in the competition, only one Applicant has regularly files their documents – Chief Assist. Prof. Dr. Alexander Gikov. He has been admitted to participate in the competition by a Committee, specially appointed for the purpose by the Director of SRTI–BAS in accordance with the Rules on the Terms and Conditions for Acquisition of Scientific Ranks and Occupation of Academic Positions in BAS. At the first session of the Scientific Jury, the decision was unanimously taken that the materials submitted by the Applicant satisfy the relevant minimal national requirements and admitted Chief Assist. Prof. Dr. A. Giko

v to evaluation. This provides grounds to me to qualify the competition as one complying with all requirements of the Act on Development of the Academic Staff in the Republic of Bulgaria and its Enforcement Rules.

The documents submitted by the Applicant by which he participates in the competition provide to make the following conclusions:

The Applicant meets the requirements for the announced competition:

- 1. The Applicant holds Diploma of the Educational and Scientific Degree (ESD) "Doctor" in scientific major "Remote Sensing of the Earth and Planets" issued by the Space Research and Technology Institute of the Bulgarian Academy of Sciences. The ESD "Doctor" has been acquired in 2019. The Thesis is on the topic ""Mapping and Analysis of Contemporary Landscapes in Rila mountain Using by GIS and Remote Sensing Methods. It falls entirely within the scope of the announced competition.
- 2. The Applicant has been occupying the academic position "Chief Assistant Professor" at the "Remote Sensing and GIS Department" in SRTI-BAS for more than 10 years.
- 3. The Applicant's total length of service by the major "Remote Sensing of the Earth and Planets" is over 20 years.
- 4. The information submitted by Chief Assist. Prof. Dr. A. Gikov for participation in the competition falls entirely within his subject field and feature good scientific metrics. To participate in the competition, he has submitted 34 scientific works apart from those presented when applying for ESD "Doctor". Ten of them have been published in leading dedicated editions, which are referenced and indexed in worldwide scientific information databases (Web of Science and Scopus), whereas 4 pertain to Q1 category and 1 to Q2.

Seven of the Applicant's publications have been cited 15 times. Four of them have been cited 11 times in scientific editions, referenced and indexed in Web of Science and Scopus, mostly by foreign authors. Table 1 displays the quantitative evaluation of the publications, informationp and documents submitted by the Applicant in accordance with the minimal requirements for occupation of the academic position of "Associate Professor" according to the Rules of SRTI-BAS. In these Rules, the points under indicator groups Γ and Δ have been augmented by 20% with respect to the minimal national requirements. As seen from Table 1, Chief Assist. Prof. Dr. A. Gikov exceeds the minimal national requirements, as well as those of SRTI-BAS, under the individual indicator groups. He has a total of 153.3 points above the required minimum.

Table 1. Quantitative evaluation of the documents submitted by Chief Assist. Prof. Dr. A. Gikov in accordance with the minimal points by indicator groups, as required for occupation of the academic position of "Associate Professor" according to the Rules of SRTI-BAS.

Indicat or group	Content	Satisfied by Dr. A. Gikov	Rules of SRTI-BAS
А	Indicator 1 Dissertation Thesis for awarding the ESD "Doctor"	50	50
Б	Indicator 4 Scientific publications (no less than 10) in editions which are referenced and indexed in worldwide scientific information databases	188.9	100
Γ	Indicator 8 Scientific publications in non-referenced journals with scientific reviewing or in edited collective volumes	281.4	220
Д	Indicator 10 Citings or reviews in scientific editions referenced and indexed in worldwide scientific information databases or in monographs and collective volumes	55	
	Indicator 12 Citings or reviews in non-referenced journals with scientific reviewing	8	
	Indicators 10 and 12	63	60
Total	Total number of points under Indicators 1, 4, 8, 10, and 12	583.3	430

- 5. In 2002, upon participation in a competition announced by SRTI-BAS the Applicant obtained the "Academician Kiril Serafimov" Young Scientists Award Honorary Badge and Diploma for merit and contributions to space research on account of the 40th anniversary of SRIT-BAS.
- 6. The Applicant participates in the European Association of Remote Sensing Laboratories (EARSeL) and the Bulgarian Geographical Society.

Major contributions of the Applicant

According to the documents submitted for the completion, Chief Assist. Prof. Dr. A. Gikov features a clearly expressed scientific profile in the field of Remote Sensing of the Earth. His major contributions in this field may be grouped in three basic scientific lines: 1) Development and improvement of the methodology for studying the environment by application of remote sensing of the Earth technologies and geographic information systems (GIS) and landscape methods: Within this line, he has a total of 15 publications, 6 of which have been referenced and indexed in *Web of Science and Scopus*; 2) Application of remote sensing of the Earth technologies and GIS for studying hazardous natural phenomena and processes. Within this line, he has a total of 15 publications, 2 of which have been referenced and indexed in *Web of Science and Scopus* and 3)

Application of remote sensing methods for mapping of agricultural crops. Within this line, he has a total of 4 publications, 2 of which have been referenced and indexed in *Web of Science and Scopus*.

Final conclusion

Based on the above conclusions for the Applicant in the competition for awarding the position of "Associate Professor", I voice the following opinion:

The materials submitted by Chief Assist. Prof. Dr. A. Gikov comply in full with the advisable requirements of the ADASRB and its Enforcement Rules for occupying the academic position of "Associate Professor".

I give unreserved *positive estimate* for the submitted materials regarding the scientific research activity of the Applicant which is of high professional level.

I am fully confident to recommend to the Scientific Jury to propose to the Scientific Council of SRTI-BAS Chief Assist. Prof. Dr. **Alexander Gikov** to occupy the academic position of "**Associate Professor**" in higher education field 4. "Natural Sciences, Mathematics and Informatics", professional line 4.4. "Earth Sciences", scientific major "Remote Sensing of the Earth and Planets" in the "Remote Sensing and GIS" Department of SRTI-BAS.

Opinion prepared by:

(Prof. Dr. E. Roumenina)

