

REVIEW

by Prof. Dr. Ivan Gatev Markov,

Member of the Scientific Jury, according to Order № 01-265 / 12 Nov. 2021 of the Director of the National Institute of Geophysics, Geodesy and Geography at the Bulgarian Academy of Sciences (NIGGG-BAS) in a **competition for obtaining the academic position of "Associate Professor"** at the NIGGG-BAS, in the Field of Higher Education - 4. "Natural Sciences, Mathematics and Informatics", Professional field - **4.4.** "Earth Sciences", Scientific specialty – "Economic and Social Geography", for the needs of the Department of Geography, announced in State Gazette № 86 / 15 Oct. 2021, with a sole candidate:

Senior Assistant Professor Dr. ALEKSANDRA LYUBENOVA RAVNACHKA

The documents for participation in the competition announced by the NIGGG-BAS for obtaining the academic position of "Associate Professor" in Field of Higher Education - 4. "Natural Sciences, Mathematics and Informatics", Professional field - 4.4. "Earth Sciences", Scientific specialty – "Economic and Social Geography", for the needs of the Department of Geography, announced in State Gazette № 86 / 15 Oct. 2021, have been submitted by one candidate only - Senior Assistant Professor Dr. Aleksandra Lyubenova Ravnachka - Bachelor and Master of Economic Geography, Doctor of Economic and Social Geography, Professional field 4.4. – "Earth Sciences". The candidate graduated from the Faculty of Geology and Geography at University "St. Kliment Ohridski, obtaining a Master's Degree. She has taken a number of training courses at the Training Center of the BAS, such as: Introduction to Open Source Geographic Information Systems; Introduction to Quantum GIS; Application of statistical methods in geographical research - Introduction to GIS and working with ArcGIS.

During the period 2003-2006 the candidate worked at the Institute of Geography, Division of "Economic and Social Geography" – as a Research Fellow 3rd degree. From 16 June 2003 to 19 Oct. 2017 the candidate held the academic position of "Assistant Professor", and since 20 Oct. 2017 – as a Senior Assistant Professor.

In 2017 Aleksandra Ravnachka obtained the educational and scientific degree of "Doctor" in Economic and Social Geography. The topic of her PhD thesis was: "Spatial disparities in the demand and supply of labour force in Blagoevgrad district (2001-2011)". Aleksandra Ravnachka speaks English and French.

For her participation in the competition, Senior Assistant Professor Dr. Aleksandra Ravnachka has submitted 22 publications that do not repeat those submitted for obtaining the educational and scientific degree of "Doctor". A monograph / habilitation thesis has also been submitted. Of the 22 publications, eight are independent and 14 are co-authored. Two scientific papers - **C 7.1. and C 7.2.** - are published in scientific journals that are referenced and indexed in world-renowned scientific databases.

General eligibility criteria

The eligibility criteria according to Art. 24 of the Act on Development of the Academic Staff in the Republic of Bulgaria (ADAS) and Art. 11 of the Regulations for the conditions and the order for obtaining scientific degrees and holding academic positions at the BAS, and Art. 52 of the Regulations for application of the ADAS at the NIGGG-BAS include:

2.1. Candidates must hold the educational and scientific degree of "Doctor".

The candidate admitted to the competition holds a Doctor's degree in Professional field 4.4 "Earth Sciences", Scientific specialty "Economic and Social Geography", after a successful defense of a doctoral thesis titled: "Spatial disparities in the demand and supply of labour force in Blagoevgrad district (2001-2011)", Diploma for the educational and scientific degree of "Doctor" - № 000864 / 05 Apr. 2017.

2.2. Candidates are required to have held the academic position of "Assistant Professor" for at least two years or have been lecturers, including part-time lecturers, at another higher education institution or research organization.

Senior Assistant Professor Dr. Aleksandra Lyubenova Ravnachka has submitted a report from the NIGGG-BAS, Department of Geography, that she was an employee holding the academic position of "Assistant Professor" from 16 June 2003 to 19 Oct. 2017 and "Senior Assistant Professor" since 20 Oct. 2017 to date.

2.3. Candidates must be required to have published a monograph or equivalent publications (not less than 10) in scientific journals that are referenced and indexed in world-renowned scientific databases, which do not repeat those submitted for obtaining the educational and scientific degree of "Doctor".

Senior Assistant Professor Dr. Aleksandra Lyubenova Ravnachka has submitted a monograph: **Ravnachka, Al.** *Demographic situation and labour market in Blagoevgrad and*

Kyustendil districts. "Az-Buki" National Publishing House for Education and Science at the Ministry of Education and Science, 2021, 216 pages, ISBN 978-619-7065-80-0.

3. Compliance with the obligatory minimum national requirements under Art. 26, para. 2 and 3, respectively under Art. 26, para. 5 of the ADAS for occupying the academic position of "Associate Professor".

To hold the academic position of "Associate Professor", the candidate is subject to increased requirements (compared to the minimum national requirements), introduced by Article 2, item 4.3 of the Regulations on the terms and conditions for obtaining scientific degrees and for holding academic positions at the BAS, and its Appendix № 1.

To participate in the competition, the candidate has provided a signed list of publications and copies of them, a list of citations signed by the candidate, as well as a reference for meeting the minimum requirements for the academic position of "Associate Professor", according to the regulations. The analysis of the above-mentioned documents established the following:

According to the attached reference for compliance with the minimum requirements, a fulfilment of **group A and group B indicators** can be established. The candidate holds a Doctor's degree (**group A**), for which **50 points** are awarded. In **group B**, the candidate has submitted a monograph titled: *Ravnachka, Al. Demographic situation and labour market in Blagoevgrad and Kyustendil districts. "Az-Buki" National Publishing House for Education and Science at the Ministry of Education and Science, 2021, 216 pages, ISBN 978-619-7065-80-0*, for which **100 points** are awarded.

In **group C**, indicator 7, Dr. Aleksandra Ravnachka has submitted 21 publications. Two of them - **C 7.1.**, **C 7.2.**, are published in scientific journals that are referenced and indexed in world-renowned scientific databases, **C 7.1.** - Koulov, B., E. Ivanova, B. Borisova, A. Assenov, **A. Ravnachka**. GIS-based Valuation of Ecosystem Services in Mountain Regions: A Case Study of the Karlovo Municipality in Bulgaria. One Ecosystem, 2, Pensoft, 2017, ISSN 2367-8194 (online), DOI: 10.3897 / oneeco.2.e14062 - Scopus. **C 7.2.** - Nedkov, S., K. Naydenov, A. Ravnachka, M. Ivanov. The new vision towards smart geography in south Eastern Europe. European Journal of Geography, 10, 2, 2019, pp. 6-11, ISSN: 1792-1341. Both publications are co-authored and in English. The candidate obtains **18 points**.

Under **indicator 8.** - Scientific publications in non-referenced journals, or in edited collective volumes - **17 publications** have been submitted, of which 13 scientific papers and 4

scientific reports. The candidate is the sole author of 7 of the papers, while in 10 other she is a co-author. Six of the publications are in English.

Under **indicator 9** - chapters from collective monographs, **two co-authored publications** have been submitted by the candidate, both in English.

In group C, the candidate has obtained **241.84 points**.

In group D.10 - *citations or reviews in scientific journals, referenced and indexed in world-renowned scientific information databases, or in monographs and collective volumes*, the candidate has submitted **4 cited publications in SCOPUS and WoS databases**, the first of which has one citation in SCOPUS and WoS database, the second publication has two citations, the third publication – one citation, and the fourth publication – also one citation in SCOPUS and WoS databases.

In group D.11. - *Citations or reviews in scientific journals, referenced and indexed in world-renowned scientific information databases*, the candidate has submitted **3 publications**, the first of which (11.1.) has two citations, the second one (11.2.) - one citation and the third one (11.3.) - one citation.

In group D.12. - *Citations in peer-reviewed non-referenced journals*, the candidate has submitted **8 publications**, the first of which (12.1.) has one citation, the second one (12.2.) - two citations, and the rest as follows: (12.3.) - two citations, (12.4.) - one citation, (12.5.) - one citation, (12.6.) - two citations, (12.7.) - five citations, and (12.8.) - three citations.

Total number of points in group D: 71

E.15. Participation in scientific and educational projects.

The candidate has declared participation in three projects, which accounts for **40 points**.

The ratio between the required minimum and the acquired by the candidate number of points by groups of indicators, can be seen in Table 1. The candidate meets the requirements for a minimum number of points by groups of indicators, while the sum of acquired points **exceeds the required minimum**.

Table 1. Ratio between the required minimum and the acquired by the candidate number of points by groups of indicators

<i>Group of indicators</i>	<i>Contents</i>	Required number of points for the position of “Associate Professor”	Acquired by the candidate number of points
A	Indicator 1	50	50
B	Indicator 3	100	100
C	Sum of indicators 5 to 9	220	241,84
D	Sum of indicators 10 to 12	60	71
E	Sum of indicators 15 to 16	30	40
Total		430	502,84

Source: Candidate's reference

Scientific contributions of the candidate

The report on the scientific contributions of the candidate systematizes them into three areas:

Demographic and regional development; Geographical features of the labour market, and Applications of the concept of ecosystem services.

In the submitted publications, these areas of scientific work of the candidate are intertwined and complementary to each other - the regional development is largely influenced by the demographic situation in the considered territories, and they determine the aspects of the labour market. **The candidate's monograph** is of key importance - the main contributing moments are largely developed and synthesized there.

The author emphasizes two determining factors of regional development - regional demographic and socio-economic processes. These processes are the basis for the formation of the labour market. The main goal of monographic study is first to identify and analyze the specifics of the demographic processes in Blagoevgrad and Kyustendil districts, and secondly - to assess the demographic processes' impact on the labour market. Special attention is paid to the internal regional differences at municipal level in order to clarify the existing common features and differences at local level.

Based on the comparative demographic analysis, the author finds that Blagoevgrad district exhibits greater opportunities for the formation of labour resources than Kyustendil district. Its population has a more favourable age structure than that of Kyustendil district, while both districts are characterized by lower educational status of the population compared to the national average. The large share of low educated population in both districts has a negative impact on the quality of the labour force and on the opportunities for socio-economic

development. The comparative analysis between the two districts finds that the population in Blagoevgrad district exhibits a lower level of education.

The author concludes that in order to limit the negative trends in the demographic situation in both districts, it is necessary for the regional demographic policy to be aimed at increasing the birth rates, stimulating the immigration to the region, developing the health care and social services for the elderly and creating conditions for successful combination between labour and family care. Other studies (C 9.1., C 8.7., C 8.12.) determine the parameters of the demographic and socio-economic development of rural areas in Bulgaria, as well as of the municipalities in the mountain areas of Bulgaria. *A classification of the municipalities in the mountain areas of Bulgaria has been proposed.*

Analyzing economic activities, the author outlines the development of a real economy - low-tech low-wage production, leading to the creation of unsustainable jobs for people with only secondary and lower education, and low living standards. This trend is a serious challenge to achieving smart and sustainable economic growth in both districts.

A comparative analysis between the two districts shows that in Kyustendil district the values of indicators such as *volume of foreign direct investments (FDI)*, *gross value added (GVA)*, *number of enterprises*, etc., are lower, which has a direct impact not only on economic growth of the district but also on the state of the labour market. This, together with the low investment interest, low competitiveness and limited opportunities for alternative employment of the population, has been identified by the author as one of the most important problems in the economic development of Kyustendil district and can be considered as part of the scientific contributions.

The ongoing transformation processes in the economic environment of the two districts over the last three decades, which have a direct impact on the demographic processes and the state of the labour market, have been successfully analyzed by the candidate. These processes largely shape the qualitative characteristics of the labour force, the levels of employment and unemployment, and the sectoral structure of labour supply and demand in both districts (NUTS 3). The sectoral structure of the regional economies shows an increasing role of the service sector for the creation of the regional GVA, as well as for job opportunities and employment of the population. The conclusions can be successfully used in the development of methods for interim assessments of the Integrated Development Plans (IDP) (2021-2027) of the municipalities in both districts.

In view of the emerging labour force shortages and the negative changes in the labour force's age structure, the author proposes the development and implementation of measures

aimed at persons outside the labour force in both districts. Those persons represent an important potential for the effective functioning of the labour market and are part of the reserves for increasing labour supply.

The author concludes that there are a number of challenges that regional labour markets in both districts are facing. The overcoming of these challenges is related to the development of a set of policies and measures aimed at: development of higher added value economic activities; development of research and innovation activities; attracting investments in the field of tourism and ecological agriculture in order to create new jobs in the peripheral and remote municipalities; a change in the income policy; active inclusion of the economically inactive and part-time employees in the labour market; increasing the skills of the workforce in order to integrate it into the labour market. Some of the conclusions are definitely contributing in nature, and could be used in policy-making by public administrations at regional and local level.

Conclusion

The inspection of the submitted materials established no violations of the competition procedure. The requirements of Art. 29 (1), items 1 to 6, Art. 29b (1), (2) and (3) of the ADAS, Art. 60 (1) and (3), as well as Annex Art. 1a (1) of the ADAS for the minimum national requirements for the scientific, teaching and / or artistic, creative or sporting activity of the candidates for the academic position "Associate Professor" in Professional field 4.4 "Earth Sciences".

Based on the acquaintance with the candidate's documents for participation in the competition, and on the evaluation of the publications and the documentary evidence submitted, the following conclusions can be made:

Senior Assistant Professor Dr. Aleksandra Ravnachka:

- holds the educational and scientific degree of "Doctor";
- has held the academic position of "Senior Assistant Professor" in the Department of Geography of the NIGGG-BAS since 20 Oct. 2017 to date;
- has published an original monograph, original scientific papers and reports in specialized scientific journals in the field of regional development, geographical features of the labour market, and application of the concept of ecosystem services, that do not repeat those submitted for obtaining the educational and scientific degree of "Doctor";

- meets the minimum national requirements (Article 60, item 5 of the ADAS. The total number of points of the candidate exceeds the required minimum (Table 1);
- has published 21 scientific papers and reports, two of which are in English, published in scientific journals that are referenced and indexed in world-renowned scientific databases;
- has submitted **four** publications cited in SCOPUS database, the first of which has one citation in SCOPUS and WoS database, the second one – two citations, the third one – one citation, and the fourth one – one citation.

No plagiarism has been established in the candidate's scientific works according to the statutory order - art. 6, para. 1 of the Regulations for the Structure and Activity of Sofia University, and art. 4 (11) of the ADAS. The scientific production of 22 scientific works, submitted and accepted for evaluation, is sufficient in volume and scientific output, and is produced after the obtaining of the educational and scientific degree of "Doctor".

The results of the review of the documents submitted for the competition, the reference for fulfillment of the minimum requirements and of the original scientific contributions, gives me grounds to express a completely positive attitude (IN FAVOUR) on the candidacy of Senior Assistant Professor Dr. Aleksandra Ravnachka for obtaining the academic position of "Associate Professor" in the Field of Higher Education - 4. "Natural Sciences, Mathematics and Informatics", Professional field - 4.4. "Earth Sciences", Scientific Specialty "Economic and Social Geography".

Veliko Tarnovo

21 Jan. 2022

REVIEWER:

(Prof. Dr. Ivan Markov)