### TO THE CHAIRMAN OF THE SCIENTIFIC JURY

Assoc. Prof. Dr. Nadezhda Ilieva,

NIGGG - BAS

#### REVIEW

#### by Prof. Dr. Ivan Gatev Markov,

Member of the Scientific Jury, in accordance with Order No. 01-276 / 27 August 2019 of the Director of the National Institute of Geophysics, Geodesy and Geography at the Bulgarian Academy of Sciences on the competition for acquiring the academic position of "Associate Professor" at the National Institute of Geophysics, Geodesy and Geography at the Bulgarian Academy of Sciences, Area of higher education - 4. Natural sciences, mathematics and informatics, Professional field - 4.4. Earth Sciences, academic discipline - Economic and Social Geography, for the needs of the Department of Geography, announced in the State Gazette, issue 51 / 28 June 2019; Candidate: Assist. Prof. Dr. Poli Nikolova Roukova

Documents for participation in the competition for associate professor in Area of higher education - 4. Natural sciences, mathematics and informatics, professional field - 4.4. Earth Sciences, academic discipline - Economic and Social Geography, opened by the NIGGG at the BAS and announced in State Gazette No. 51 from 28 June 2019, were submitted by only one candidate - Assistant Professor Poli Nikolova Roukova – a PhD in Economic and Social Geography, Professional field 4.4. Earth Sciences.

The submitted documents for participation in the competition (a list of 13 documents signed by the applicant) meet the requirements of Art. 52. (3) of the Regulations for the Implementation of the Development of Academic Staff in the Republic of Bulgaria Act (DASRBA) at the National Institute of Geophysics, Geodesy and Geography (NIGGG) – Bulgarian Academy of Sciences.

Dr. Poli Roukova graduated from St. Kliment Ohridski Sofia University, Faculty of Geology and Geography, majoring in Economic Geography and obtaining a Master's Degree in Economic Geography. In 1996 she specialized in the fields of Time- space Geography, Behavioral and Social Geography at the Department of Human Geography - Lund University, Sweden, as a scholarship student of the Swedish Institute, Stockholm, Sweden. In 2003 the candidate completed a course in "Preserving Cultural Heritage in Sustainable Society" - University College of London, UK. The applicant completed a course in the implementation of the "EU Generating and Engagement Networking Inclusion" (EUGENI) - University of Southampton, UK in 2014. During the 2014-2018 period Poli Roukova is a PhD student in independent training at the NIGGG - BAS and in 2019 acquired the academic and educational degree of "doctor" (PhD) in Economic and Social Geography, Professional field 4.4. Earth Sciences.

Dr. Poli Nikolova Roukova has submitted 29 publications for the competition, which do not overlap with the ones submitted for acquiring the PhD degree. The submitted publications include five chapters of monographs, 18 scientific papers and 6 scientific reports. In the majority of the publications the candidate

is a co-author - a total of 21 (72.4%). A significant part of the scientific production of the candidate is in English - 12 publications (41.3%), of which 10 papers and one chapter of a collective monograph (37.9%) have been published abroad.

#### General eligibility criteria.

The eligibility criteria under Art. 24 of the Development of Academic Staff in the Republic of Bulgaria Act (DASRBA) and Art. 11 of the Regulations on the Terms and Conditions for Acquiring of Academic Degrees and Occupation of Academic Positions in the Bulgarian Academy of Sciences and Art. 52 of the Regulations for the application of the DASRBA in the National Institute of Geophysics, Geodesy and Geography - BAS include:

#### The applicants must hold a PhD degree.

The candidate admitted to the competition holds a PhD in professional field 4.4. - Earth Sciences, academic discipline - Economic and Social Geography. The PhD thesis defended by the candidate is entitled "Impact of the International Division of Labour on the Localisation of Apparel Industry in South Western and South Central Bulgaria". The PhD diploma was issued on 10 April 2019.

## The applicants must have occupied the academic position of assistant professor or have been university professors, including part-time lecturers, at another university or a scientific organization for at least two years.

Assist Prof. Dr. Poli Roukova has submitted a report from the National Institute of Geophysics, Geodesy and Geography, Department of Geography, that she has been an assistant professor since 27 March 1991 to-date, during which period she also held the position of senior assistant professor for a period of 16 years.

# The applicants must have published a monograph or an equivalent number of publications (not less than 10) in peer-reviewed and indexed in world-renowned scientific information databases editions, while the publications themselves do not replicate those submitted for the obtaining of the Ph.D. degree.

Dr. Poli Roukova has submitted 10 scientific publications in peer-reviewed and indexed in worldrenowned scientific databases editions (SCOPUS database). Nine of the publications are in English, published abroad, and one in Bulgarian, published in Bulgaria.

## Compliance with the mandatory minimum national requirements under Art. 26, Paragraphs 2 and 3, respectively under Art. 26, Paragraph 5 of the DASRBA for occupation of the academic position of "Associate Professor".

In order to acquire the academic position of "Associate Professor", the applicant is subjected to higher requirements (in comparison with the minimum national requirements) introduced by Article 2, item 4.3 of the Regulations on the Terms and Conditions for Acquiring of Academic Degrees and Occupation of Academic Positions at the Bulgarian Academy of Sciences, Annex 1.

In order to participate in the competition, the applicant has submitted a signed List of publications and copies of the latter, Citation list with the candidate's signature, a Reference for meeting the minimum requirements for the academic position of "Associate Professor", according to the legislative documents. The analysis of the above-listed documents revealed the following:

The attached report ascertains the compliance with the minimum requirements of **group A and group C** indicators. The applicant holds a PhD degree (**group A**), which awards the applicant **50 points**. As for **group C**, the candidate has submitted the required scientific publications (not less than 10) in peer-reviewed editions indexed in world-renowned scientific databases (SCOPUS). In all ten publications, the candidate is part of the authors' team and, depending on the number of members of the respective publication, receives a certain number of points (60/n for each publication). The candidate is thereof awarded 100.45 points.

In line with **group D** indicators, 19 publications have been taken into consideration. Under item 8. - Scientific publication in non-refereed, peer-reviewed journals or in edited collective volumes - a total of 15 publications have been included, of which 9 scientific papers and 6 scientific reports. In five of those publications, the applicant is the sole author and in the other ten publications the applicant is a co-author. Three of those publications are in English and two have been published abroad. The candidate is awarded thereby 185.01 points.

Under item 9. - A collective monograph chapter - four collective monograph chapters have been submitted, where the applicant is the sole author in three of those chapters and co-authored one monograph chapter. Under item 9. the candidate obtains a total of 35 points, or a total of 220.01 points in group D.

In **group E**, **indicator 10** - Citations or reviews in peer-reviewed editions indexed in world-renowned scientific information databases or in monographs and collective volumes (x 5 points for citation), the applicant has submitted three cited publications found in the SCOPUS database.

The first publication is titled "Outward processing, EU enlargement and regional relocation in the European textiles and clothing industry: Reflections on the European commission's communication on the future of the textiles and clothing sectors in the enlarged European Union' Smith A., Pickles J., Begg R., Roukova P., Bucek M. (2005) European Urban and Regional Studies, 12 (1), pp. 83-91. "(as of July 2019, the paper had a total of 18 citations registered in the SCOPUS database). The candidate has submitted six publications citing the above-mentioned paper, which yields 30 points.

The second publication is titled "Upgrading, changing competitive pressures, and diverse practices in the East and Central European apparel industry. Pickles J., Smith A. M., Bucek M., Roukova P., Begg R. (2006) Environment and Planning A, 38 (12), pp. 2305-2324. "(as of July 2019, the article had a total of 70 citations registered in the SCOPUS database). The applicant has submitted twelve publications citing the above-mentioned paper, which yields 60 points.

The third publication is titled "Reconfiguring post-socialist regions: Cross-border networks and regional competition in the Slovak and Ukrainian clothing industries." Smith A., Pickles J., Bucek M., Begg R., Roukova P. (2008) Global Networks, 8 (3), pp. 281-307 "(as of July 2019, the article had a total of 19 citations registered in the SCOPUS database). The candidate has submitted six publications citing the above-mentioned paper, which yields 30 points. Thus the candidate obtains a total of 120 points in group E.

The relation between the required and the obtained points by group of indicators is shown in Table 1. The applicant meets the requirements for the minimum number of points per group, while the required minimum in group D has been exceeded twice. The total sum of points exceeds the required minimum.

Table 1. Ratio between the required and the obtained points by group of indicators.

Group of indicators	Content	•	Number of points obtained by the candidate
А	Indicator 1	50	50
С	Indicators 3 and 4	100	100,45
D	Sum of indicators from 5 to 9	220	220,01
E	Sum of indicators from 10 to 12	60	
Total		430	120 490,46

The applicant has participated in many national and international projects. The publications in group C are related to the following three projects:

*Project 1:* Reconfiguring Economies, Communities, and Regions in Post-Socialist Europe: Competitive Pressure, New Firm Creation, and Outward Processing in the Apparel Industry. Case studies: Bulgaria and Slovakia; PI: prof. J. Pickles, UNC and prof. R. Begg, IUP. Funded by the US National Science Foundation, 2001-2007. For the 2001-2004 period the project was within the bilateral agreement on international cooperation between the US National Science Foundation and the Institute of Geography at the BAS. The national coordinator for Bulgaria was Assist. Prof. Poli Roukova.

*Project 2:* The Territorial Impact of Globalization for Europe and Its Regions (TIGER); Lead Partner: Dr. G. Van Hamme, Universite Libre de Bruxelles, Belgium, funded under the ESPON 2013 program of the EU Regional Development Operational Program, 2010-2013; Contract No. 068/2010 of the National Institute of Geophysics, Geodesy and Geography at the Bulgarian Academy of Sciences. Assist. Prof. Poli Roukova was the national coordinator for Bulgaria.

*Project 3:* Self-care Support for People with Long Term Conditions, Diabetes and Heart Disease: A Whole System Approach, (EU WISE). Lead Partner: Prof. A. Rogers, University of Southampton, UK; Co-funded under the Seventh Framework Program, General Directorate of Research and Innovation, EC, 2012-2015. Contract No. F3-2011-279081, where P. Roukova was a key researcher.

#### Scientific contributions of the candidate.

Two groups may be identified in the applicant's scientific contribution report.

**The first group** is related to the publications in group C, item 4. In the procedure for occupation of the academic position "Associate Professor" where an equalization formula for equating the monograph to an equivalent number of articles is applied, an extended habilitation reference of scientific contributions is required, where the applicant briefly states the respective scientific field, their personal contributions and references. The habilitation reference provided by applicant lists ten publications indexed in SCOPUS and WoS. These publications are the result of teamwork on the projects described above, which have an

extended temporal, information and content scope. The papers discuss two current areas of research in academic economic and social geography:

- 1. Socio-economic geographical aspects of regional development;
- 2. Social geography of health.

It is those two areas which the applicant's scientific contributions are to be attributed to. Poli Roukova's personal participation as a co-author is determined by her activities as a national coordinator of *Project 1* and *Project 2* and as a key researcher for *Project 3*. She is a co-author not only in the publications in group C, item 4 - Publications, but also in another group of 23 general publications and reports, not included in this competition, but related to the research topic of the above-listed projects. Those publications are presented in III – References.

#### Theoretical and methodological contributions.

Research approaches and methods used for the first time in the social and economic geography of Bulgaria have been applied.

For the first time in economic geographical studies in Bulgaria the global commodity chain, the global value chains and the global production networks approach has been applied in order to assess the impact of restructuring of the industries and regions in Bulgaria and to assess the impact of globalization on the competitiveness of European countries and regions.

Poli Roukova has participated in the adaptation and implementation of research methodologies which are novel for Bulgaria, such as the methodology for self-assessment of the personal health status (SF-12), physical activity (RAPA), diet and smoking (SDCSCA) and EUGENI (EU Generating and Engagement Networking Inclusion) - Personal Community Mapping and Analysis, etc. Poli Roukova is part of the team involved in the verification of the Bulgarian Health Education Impact Questionnaire (HeiQ) and has been licensed to use it.

Scientific contributions related to the first area of research - Socio-economic geographical aspects of regional development:

• The process of industrial restructuring has been analyzed and its effect on regional development in postsocialist countries has been evaluated.

• The possibilities for industrial improvement of the clothing production in Bulgaria under the conditions of international competitive pressure, and the variety of practices for adaptation of the local companies have been analyzed.

• The impact of cross-border clothing production networks on the competitiveness of the regions has been analyzed.

• The competitive positions of the European countries and regions in the context of the international division of labor have been analyzed.

#### Scientific contributions related to the second area of research - Social Geography of Health:

Analyses and assessments of the impact of social environment resources (apart from health services) on the ability of chronically ill people to manage their long-term lifestyle in Bulgaria have been made.

Apart from official national and regional statistics, most publications also apply primary information gathered within international projects in which Poli Roukova was a project leader or a project participant. This is a personal contribution of the candidate and enhances the objective character of the conclusions drawn in the scientific production of the author.

**The second group** of scientific contributions derives from the publications within in **group D** (p. 8 and p. 9). The provided contributions are in the area of socio-economic geographical aspects of regional development and are organized into three groups:

#### 1. Regional changes in economic activity of the population.

A comparative and structural analysis of women's unemployment at the beginning of the socio-economic transformation period at national and regional level has been made. The dynamics of unemployment in the Danubian municipalities of Bulgaria during the transitional period has been analyzed and local factors have been identified. The socio-economic aspects of the living environment in Burgas district in terms of employment have been evaluated, with both parties in the process surveyed - employers and employees. The regional specifics and changes in the economic activity of the population for the 1990-2000 period have been examined. A structural analysis of the regional labor markets in the South Central and Southwestern planning regions of Bulgaria have been made and the trends of influence of the EU enlargement have been outlined.

#### 2. Socio-economic restructuring and regional development.

The priorities of the national regional development policy have been analyzed and opportunities for its optimization have been identified. The greater importance of the regions for targeted development of cross-border cooperation compared to that of planning regions has been proved as a means of reducing socio-economic problems. The impact of cross-border economic links for maintaining employment in border areas has been assessed. The state of the economy and infrastructure of Kardzhali district has been analyzed in order to assess the regional opportunities and barriers to the development of cross-border cooperation with Greece.

The risk factors in the socio-economic development of the municipalities in Burgas district have been evaluated in order to predict the effect of the undergoing reforms. The influence of socio-economic transformations in the various spheres on the living environment - labour, habitation, recreation - has also been analyzed.

The changes in the structural importance of the city of Sofia and Sofia Municipality have been determined by analyzing the structural transformations of the economic profile and the servicing functions of the latter. A projection of the spatial development of the capital city has been made.

The regional dynamics in the development of the service sector, the textile and leather goods industries have been researched and analyzed.

#### 3. Socio-economic effects of environmental pollution.

The changes in the distribution of responsibilities and obligations of the environmental management of the Municipality of Burgas have been examined. The role of stakeholders and institutions in environmental management has been analyzed. Poor coordination between local actors – the local authorities, the business and the public - in solving environmental problems has been demonstrated.

The necessity of a spatially differentiated approach in studying the living environment risks and the identification of vulnerable social groups of the population has been justified. An assessment of the health

status of the population in areas with environmental problems, such as the city of Burgas, has been made. The impact of the economic condition of the population of the Municipality of Burgas on limiting the population's ability to lead a healthy lifestyle - healthy nutrition, physical exercise capacity, rational work and rest regime, has been investigated. The incidence rate of the population in the region of Burgas by major groups of diseases in the context of environmental pollution has been analyzed.

The applicant demonstrates profound theoretical competence in the field of contemporary research in economic and social geography, as well as in regional development, in particular - spatial organization of production (the use of the theory of global product chains and global production networks in the study of the spatial organization of clothing production).

The empirical studies of certain parts of the territory of the country and the identification of correlations to similar global and regional trends in the European Union are also of considerable scientific value.

#### **Recommendations.**

- In the future, Dr. Poli Roukova should direct her efforts to systematizing her research and present it in the form of monographs, textbooks, etc., so as to make the research results accessible to the wider academic community and the students' body, as well as their application in practice.
- The candidate is advised to shift the proportion of collective / sole-author publications in favor of the latter.

#### Conclusion.

The analysis and the examination of the competition documents, the provided reports on the fulfillment of the minimum requirements and the original scientific contributions of the candidate, give me reason to express a completely positive attitude ("IN FAVOUR") towards the candidacy of Assistant Professor Poli Nikolova Roukova for acquiring the academic position of "Associate Professor" in Area of higher education 4. Natural sciences, mathematics and informatics, Professional field - 4.4. Earth Sciences, Academic discipline - Economic and Social Geography.

10 Oct. 2019

**REVIEWER:** 

Veliko Tarnovo

(Prof. Dr. Ivan Markov)