

## STATEMENT – CANDIDATE ASSESSMENT

on the application for academic position „Professor” in the domain 4. Natural sciences, mathematics and informatics; subdomain 4.3. Biological sciences, scientific specialization "Ecology and ecosystem conservation – Phytoecology", published in State Gazette, № 88/13.10.2020, for the needs of the Faculty of Biology (FB) of Sofia University (SU) „St. Kliment Ohridski“.

Written by Dr. Petar Zhelev Stoyanov, Professor

University of Forestry – Sofia

One candidate has applied for the position – Dr. Rossen Todorov Tzonev, Associate Professor in the Department „Ecology and Environmental protection“ of the FB of SU “St. Kliment Ohridski“.

### 1. Brief presentation of the applicant

Dr. Rossen Todorov Tzonev graduated from the FB of SU “St. Kliment Ohridski” with a M.Sc. in Ecology in 1998. During the period 1999-1992 he was a Ph.D. student in the same faculty and defended his Ph.D. thesis „Flora and vegetation of the Middle Danube plain between the valleys of the rivers Vit and Studena” in 2003. In 2002 he got a position of Assistant Professor in the Department “Ecology and Environmental protection”, and in 2010 was promoted to Associate Professor.

### 2. General description of the applied documents

Dr. Rossen Tzonev has applied a full set of documents, thus meeting the requirements of the Act for Development of the Academic Staff in the Republic of Bulgaria (ADASRB) and the Rules for its implementation and the Rules for the development of the academic staff of SU “St. Kliment Ohridski”.

### 3. Evaluation of the scientific production and contributions of the applicant

#### 3.1. General characteristics of the scientific production and publication record

Dr. Rossen Tzonev has submitted scientific works meeting the minimum requirement for the acquired position set in the ADASRB and the respective Rules, as follows: indicator A: 50 pts for a Ph.D. degree; group of indicators B: 110 pts from 6 publications (100 required); group of indicators G – 352 pts (200 required), group of indicators D (citations) – 697 pts. And indicators E – 400 pts. This information shows that the applicant meets all minimum requirements set in the legislative documents at national and University level, and in some cases exceeds them substantially.

Dr. Tzonev has submitted total 49 publications, six of which are differentiated as habilitation work. Of these 6 papers three are published in journals in the highest quartile rank (Q1), three in Q2 journals and one – in a Q3 journal. Eighteen of the publications are in journals refereed in Web of Science (WoS) and/or Scopus databases; 11 in journals with both Impact factor and SJR, and 7 – in

journals with SJR only. The applicant indicates only SJR for the journal *Acta Botanica Croatica*, while this journal has also Impact factor since long time ago. For other 16 publications it is explained that they are „in other specialized journals refereed in databases others than WoS and Scopus“. However, some of the journals, like *Phytologia Balcanica*, have been refereed in the extended framework of databases of WoS after 2016. There are other 4 publications with more than 30 co-authors and they are differentiated in a separate group. Five of the publications represent monographs and books, including chapters in monographs. There is also one handbook for the students in FB of SU “St. Kliment Ohridski”, entitled „Protected territories and biodiversity conservation“. The information provided illustrates a publication record, which impresses not only with the quantity but with the quality, expressed in the high journal ranks.

### **3.2. Research activity**

The research works of Dr. Rossen Tzonev correspond to the topic of the competition. The contributions are well structured, and these in the publications differentiated as a habilitation work, are presented separately.

The contributions of Dr. Tzonev are in several domains that are well differentiated in the presented information. The most important of them all are in the field of vegetation classification. The syntaxa he had studied relate to diverse ecosystems ranging from coastal and marsh communities to typical forest habitats. Here I could mention the first phytocoenotic classifications of the oak forests in Bulgaria, of serpentinite plant communities, of Sweet chestnut forests, of the communities of *Genista lydia*, of riverine high herbaceous vegetation, of the European marsh vegetation belonging to class Phragmito-Magnocaricetea, of macrophyte flora and vegetation in Srebarana maintained reserve, of wet meadows „Ranislavtzi“ and many others, which are impossible to be presented in detail in the present statement. A very important contribution is the published European Red List of Habitats.

One character, typical for the fast-developing field of the vegetation classification with application of modern methods is the updating and revising of results obtained previously and correcting of hypotheses and opinions based on them. In this respect, a large-scale revision is performed on the classification of the beech forests in Europe and Asia minor, and new, updated classification is proposed. Similar revision at European level is performed on the coastal perennial herbaceous communities, and it resulted in identification of seven geographically differentiated main types of communities. The revision of the vegetation on the coastal sand dunes in Europe and in Mediterranean region resulted in classification in 18 alliances, one of them new to science. Also, validation and effective publication of diagnoses of previously described syntaxa could be classified into this group of contributions.

The studies on the very diverse plant communities resulted in many described syntaxa, being new to science, or to the territory of Bulgaria, or Balkan Peninsula. Two alliances and at least ten associations are new to science, while the syntaxa new to Bulgaria include three alliances, one class and many associations.

Since the application of Braun-Blanquet method for the vegetation classification requires a very detailed floristic inventory, a part of the contributions of Rossen Tzonev are floristic ones. They include 4 species new to Bulgarian flora, and updated information about the distribution of many other species.

Due to the strong background and rich biological culture of Dr Tzonev, he has achieved contributions in areas different from the studies on the vegetation cover. These contributions concern the distribution, habitats and conservation status of numerous bird species, of the legless lizard *Pseudopus apodus* and of 11 species of mushrooms.

The contributions with applied importance result from the very intense nature-conservation activities of Dr. Tzonev, which is commented below. These contributions include characteristics of the flora, vegetation and natural habitats in different natural areas with conservation importance, which resulted in identifying of two new habitats for Bulgaria, included in Appendix 1 of Directive 92/43/EC. Also, the databases for the Balkan vegetation and for the wetland can be considered as applied contributions.

Dr. Tzonev has achieved applied contributions also in the field of agriculture and fisheries, concerning the problem of fresh-water fisheries, with the application of submeasure “Pastoralism”, with the ecosystem services of agriculture ecosystems, with fodder resources and some other issues.

The general review on the scientific works of Dr. Tzonev allows the conclusion that the results achieved impress with their diversity, large-scale scope and depth.

### **3.3. Citing of publications in the national and foreign literature**

Dr. Tzonev has submitted information about 430 citations of his papers, which, on the one hand, exceeds the minimum requirements several times, and on the other hand does not include all the citations of his publications. A very fast check in the Google Scholar shows that in fact the number of citations of his publications is much more. This indicates that the colleagues in Bulgaria and abroad are aware of his research and it has been properly evaluated.

### **4. Expert and project activities.**

Dr. Rossen Tzonev has participated in more than 50 research and applied projects related to the inventory of biological diversity in different natural territories, to vegetation classification and nature conservation. In many international projects he was a national coordinator or leader of the Bulgarian research team.

Also, the applied nature conservation activity of the applicant deserves high evaluation. He is an author of numerous reports for ecological evaluation, impact assessment, compatibility of plans and projects with the nature and objectives of Natura 2000 protected zones, as well as reports and evaluations related to other territories. In many of these activities he kept strong views and opinions in favor of nature conservation, even though this did cost him some conflict with local

administrative structures, with organizations with investment intentions. It could be stated that except being a renowned scientist, it is also a prominent nature conservationist.

### **5. Pedagogical activity**

Dr. Rossen Tzonev has taught five classes to the students of BSc. and M.Sc. programs in the FB of SU “St. Kliment Ohridski” and has almost two-decade experience as an University teacher who passed all the “steps” from Assistant Professor, Senior Assistant Professor to Associate Professor. He was advisor of many M.Sc. students and of one Ph.D. student who successfully defended his thesis.

### **6. Critical notes and recommendations**

I do not have substantial critical remarks and recommendations.

### **7. General assessment**

The applicant Dr. Rossen Tzonev meets all requirements for the academic position „Professor“ in the Faculty of Biology of SU „St. Kliment Ohridski“. He is one of the leading scientists in the field of phytosociology and vegetation classification in Bulgaria and is widely recognized at international level. I have had opportunities to work with him with the framework of diverse scientific and applied projects and to get impressions about his erudition and experience in the study of the vegetation cover. He has proven his abilities to work both independently, and in a team, including as a team leader. Based on my impressions on the scientific production and the other excellences of the applicant Dr. Rossen Todorov Tzonev, Associate Professor, I declare that I strongly support his candidature for the academic position of full professor and I allow myself to recommend to the esteemed members of the Scientific Jury to vote for promotion of Dr. Tzonev to the academic position “Professor”.

Date: 03.02.2021 г.

Sofia

Signature:



(Dr. Petar Zheev, Professor)