

ASSESSMENT

Regarding an opening for the academic position of “Associated professor” in professional field 5.5
” Transport, navigation and aviation” for the subject “Biodiversity conservation”.
Officially announced in State Gazette issue 65/06.08.2020 with candidate Stoyan Vergiev, PhD

Member of the Scientific Committee: assoc. prof Galina Ilieva, PhD

1. General characteristics of the applicant’s research and development activities.

1.1 Scientific publications and metrics

The sole applicant for the opening position – Dr. S. Vergiev presents the following scientific works and metrics: (1) 1 PhD thesis developed and successfully defended. The PhD thesis can be related to **Indicator A** of the national requirements, 50 points can be awarded for the presented work, from a threshold of 50points.

(2) A total of 35 scientific publications grouped in the following indicators according to the minimum national requirements:

- habilitation work from a total of 13 scientific publications in publications referenced and indexed in world-renown databases. This habilitation thesis is related to **Indicator B** of the minimum national requirements, as the publications of Chief Assistant Dr. Stoyan Vergiev can be awarded 415.84 points from a threshold of 100 points;

- 22 scientific publications outside the habilitation work, in non-referred journals with scientific review or in edited collective volumes. These scientific publications are related to **Indicator Г** of the minimum national requirements. With the materials presented in the reference under **Indicator Г**, the candidate collects a total of 333.99 points from a threshold of 200points.

(3) 6 articles are cited 19 times; 14 citations are in scientific journals referenced or indexed in world-renown databases, and 5 of citations are in non-refereed journals with scientific review. The presented citations are related to **Indicator Д** of the minimum national requirements, where the applicant collects a total of 170 points from a threshold of 50 points.

*Based on the presented overview, regarding the scientific work and metrics of the applicant, I can conclude that the materials are sufficient and balanced in terms of co-authors and inclusion in both international and national referenced databases. I can state that the scientific work and metrics, presented by the applicant satisfy the national requirements in terms of **Indicator A, B, Г and Д**.*

1.2 Research and applied work of the candidate

Dr. Stoyan Vergiev has participated and presented papers at 38 conferences in the country and abroad; he is a member of the organizing committee of two international conferences. He has completed 19 online short-term advanced training courses. Three international mobilities are realized in 2010, 2012 and 2017 for the purposes of training and scientific work in research institutes in Turkey and Romania.

The candidate is a participant in 8 scientific projects (with national and international participation), two of them are research projects for TU-Varna. He is the leader of a scientific project, awarded a diploma in the competition "Month of Science" 2019. Dr. Stoyan Vergiev has participated in two projects of TU-Varna with the business.

2. Assessment of the pedagogical preparation and activity of the candidate.

The teaching activity of Ch. Assist. Prof. Dr. Stoyan Vergiev at the Technical University of Varna is since 2018 to the present. During the period he taught various disciplines, mainly from the curriculum of the specialty "Engineering Ecology", Department of "Ecology and Environmental Protection". The candidate has organized and conducted a large number of external trainings with students; has attracted and participated with students and PhD students in research projects, there is also a co-authored publication with students.

Dr. S. Vergiev has developed the syllabus for 5 teaching courses, large number of lecture courses, seminars and laboratory exercises. The candidate is author and a screenplay writer of a popular science film for educational purposes. He has successfully supervised 5 graduate students and prepared 12 reviews of diploma theses.

3. Main scientific and scientific-applied contributions

Scientific and scientific-applied contributions can be attributed to the following main areas:

- study of the modern flora and vegetation of the Bulgarian Black Sea coast, Northeastern Bulgaria and Stara Planina;

- models for identification, assessment and prioritization of territories of conservation significance and of existing protected natural territories and zones;
- protection of sand habitats, dunes and coastal areas; minimizing the impact of floods and erosion;
- models for assessing the effects of floods and erosion as a result of marine and storm events on biodiversity;
- climatic phenomena and impacts on the habitats, flora and vegetation of the Black Sea coast.

3.1. *Scientific contributions - the most significant scientific contributions are:*

- Based on the studies on the nowadays flora and vegetation of the Bulgarian Black Sea coast, Northeastern Bulgaria and Stara Planina for 12 vegetation periods (2008-2020) original scientific data on the plant diversity and its current conservation status have been obtained [Г8.1-Г8.4, Г8.6 -Г8.18, Г8.20-Г8.22];
- Dynamics and the changes in the territorial distribution of the vegetation as a result of the anthropogenic impact for the period 2008 - 2021 are traced [Г8.1-Г8.4, Г8.6, Г8.7, Г8.10-Г8.18];
- For the first time in Europe, the genus *Protanancus* is reported, suggesting its presence in China and tracing the migratory routes of the genus [B4.9].

3.2 *Scientific and applied contributions - the most significant scientific contributions are:*

- Modern calibration sets containing pollen and climate data from 759 modern surface samples for the period 2009 - 2020 have been prepared. The data is applied to track the annual variations in vegetation, pollen production and the influence of climate factors. The prepared data sets were applied and are applicable in paleoclimatic reconstructions [Г 8.10, Г 8.11, Г 8.12, Г 8.13, Г 8.14, Г 8.15, Г 8.16, Г 8.20];
- On the basis of laboratory experiments, the tolerance of salinity in floods with Black Sea waters as a result of storm phenomena on psammophytic plant species is determined, their capacity as species stabilizing sand dunes is determined [B4.1, B4.2, B4.3, Г8.8];
- GIS maps of the "hot spots" for the floristic regions of Northeastern Bulgaria and the Black Sea coast for several vegetation periods are prepared; identification and prioritization for conservationally important territories is achieved, [B4.2, Г8.2, Г8.3, Г8.6, Г8.7 Г8.18].

3.3 *Methodological contributions - the most significant scientific contributions are:*

- prepared dynamic GIS model for assessment of the consequences of floods and erosion as a result of marine impact and storm phenomena on the coastal plant communities on the Bulgarian Black Sea coast [B4.5, B4.6, B4.7, B4.8, Г8.4, Г8.19];
- an experimental methodology for establishing and evaluating the resilience of marine flooding of plant species through simulations of sea floods is achieved [B4.1, B4.5, B4.6, B4.7, B4.8, Г8.4, Г8.19];
- Critical Decomposition Time (CDT) indicator is introduced to assess plant resilience and use it to prioritize areas threatened by flooding [B4.1, B4.5, B4.6, B4.7, B4.8].

4. Significance of contributions to science and practice

In my opinion, the presented scientific production significantly expands the range of knowledge in the field and all contributions are significant. The candidate is recognizable for the scientific community in Bulgaria and abroad.

5. Critical remarks and recommendations

My recommendation to the candidate is to focus his efforts on participating in more research projects, expanding international contacts, as well as continuing with research and publications in the fields of his scientific interests.

CONCLUSION Based on my acquaintance with the presented scientific papers and the contributions achieved in them, I find it reasonable to propose Dr. Stoyan Ivanov Vergiev to take the academic position of "Associate Professor" in the professional field 5.5. "Transport, navigation and aviation" in the specialty "Biodiversity Conservation".

Date: 17.11.2021

Member of the Scientific Committee: .

/ Assoc. prof Galina Ilieva, PhD/

Заличена информация
по Регламент (ЕС)
2016/679