

БЪЛГАРСКА АКАДЕМИЯ НА НАУКИТЕ	
ИНСТИТУТ ЗА ГОРАТА	
Регистрационен номер, № и дата	
СБ-03-1204 / 30.09.2019	
Срок за изпълнение	

OPINION

on the materials for participation in a competition for the academic position "Associate Professor", professional field 6.5. Forestry, scientific specialty "Forest inventory and management" announced by the Forest Research Institute of Bulgarian Academy of Sciences in State Gazette № 44 / 04.06.2019

Candidate for participation in the competition: Asst. Prof. Dr. Angel Atanasov Ferezliev

Author of the opinion: Assoc. Prof. Dr. Tatiana Vassileva Stankova

1. Synopsis of the biographic data of the candidate

Asst. Prof. Angel Ferezliev graduated from the University of Forestry in professional speciality Forestry in 1995 and during his studies acquired also the qualification "Associate, correspondent of mass media" at the Free faculty of the University. His professional career began in April 1999 as an assistant forestry officer at the Velingrad State Forestry Range, but the same year he went to work as a teacher at Hristo Botev Vocational High School of Forestry, Velingrad. This professional engagement lasted for more than 7 years, within which the candidate acquired an additional qualification in pedagogics at the University of Food Technology, Plovdiv. In 2006 A. Ferezliev has been appointed as a head of the Conifer Forest Experimental Station, Velingrad, where he is currently employed. In 2007 - 2012 the candidate developed a PhD thesis in the scientific specialty "Forest inventory and management" on the topic "Growth peculiarities of Douglas fir (*Pseudotsuga menziesii* (Mirb.) Franco) in the Northwest Rhodopes" and defended it at the Forest Research Institute.

2. Compliance of the submitted documents and materials of the applicant with those required under the Regulations for development of the academic staff (RDAS) in the FRI - BAS.

Application and all requested documents to it, according to article 13(4) of RDAS in the FRI-BAS, are available. In addition to the lists and the evidences on the six mandatory groups of criteria, the applicant has also provided information on his participation in scientific forums, on his scientific consultancy work, for his public appearances and popularization activities etc. According to the self-assessment report on the compliance with the minimum requirements to the scientific and teaching activity for the academic position "Associate Professor" the applicant meets and exceeds the minimum thresholds by groups of criteria. The additional specific requirements of the Forest Research Institute for this position are also satisfied. However, the report does contain some factual errors and inaccuracies that I think should be noted. An article in a *Silva Balcanica* 2018 issue that is included in "C" group of criteria is not indexed in Scopus, while a 2012 article in *Nauka za gorata* is listed in group "D" as a publication outside of Web of Science and Scopus, but in fact it is indexed in WoS. For the first project referred to in criterion "F.18" lacks evidence. The thematic tasks from the BAS budget subsidy are rather sub-projects and therefore projects 8-11 should be referred to sub-group criteria "F.18" and their points halved.

Authorship-separating protocols were presented for 5 of the publications, giving greater weight to the applicant's participation. For "C" group of criteria the candidate has chosen to submit as a habilitation work 10 scientific publications in journals, which are referenced and indexed in the world databases Web of Science and Scopus. I think that the selection made is not very successful, since the selected articles are not on very similar topics and cannot be grouped under a common heading, which is also evident from the extended habilitation reference. Since these articles replace habilitation work, which is in principle a candidate's personal work, I believe that

the selected 10 articles should be in the applicant's scientific field and he should have a leading or at least sufficiently important role in them, that has to be certified by the leading author of the respective publications. The specific contribution of the applicant, within the framework of the collective publications and in accordance with his competences in the scientific field, does not appear very well with some of the formulated contributions (in connection with articles C4.3, C4.8).

3. Description of the submitted materials

The applicant participates in the competition with 29 scientific papers, 28 of which are scientific articles or conference reports, and one chapter of a co-authored monograph is included as well (Criteria groups "C" and "D"). The candidate is the leading or sole author of 17 of the publications. Twenty one citations of the candidate's scientific papers are presented, 13 of which are in Scopus or WoS indexed publications (Criteria group "E"). Asst. Prof. A. Ferezliev was a leader of 1 project with the Executive Forest Agency, which resulted in an implemented scientific-applied development. He has taken part in 4 international scientific and educational projects as well as in 6 projects from the budget subsidy of BAS (Criteria group "F"). The candidate certifies 20 participations in national and 13 in international scientific forums, has been a consultant on one doctoral and one master thesis, has written 5 peer reviews, a number of popular and media publications, presents proofs of lecture activities.

4. Applicant's main areas of research and the most important scientific and applied contributions.

The contributions in the scientific publications submitted for participation in the competition are related to the enrichment of the scientific knowledge and the obtaining of confirmatory data.

- The tree diameter, height and volume distributions in stands of different forest tree species (Douglas fir, Scots pine, Balkan beech, black locust, Macedonian pine) were investigated and interpretations were made about the influence of the tree composition, natural cataclysms, management activities, incl. agroforestry. For this purpose, routine inventory methods were used, such as analysis of distribution curves, ranking of the average tree, comparison with the general curves of Tyurin and the Weise rule, normal distribution tests.

- The height structure and the canopy structure of pure and mixed stands of Douglas fir and Balkan beech were analyzed.

- Growth in volume, height and diameter of pure and mixed Douglas fir plantations was investigated and correlations with the humidity-temperature regime of the site were sought.

- Functional dependencies for expressing the percentage of the volume increment by that of the diameter increment of Douglas fir trees are analyzed.

- Options to express the tree volume of European beech and Scots pine through simple and multiple regression models on stem diameter and height and crown diameter and length were investigated.

- The relationships were investigated and functions were derived between diameter and height of trees in black locust plantations, between crown diameter and stem diameter of beech and pine trees, between the stem form height and total height of Douglas fir trees.

5. Impact of the applicant's scientific activity in the literature.

With the 21 citations presented for the competition, most of which are in journals, referenced and indexed in the Web of Science and Scopus scientific databases, Asst. Prof. Angel Ferezliev exceeds the minimum required for Criteria group „E” over 2.5 times. Most of the

references are made to articles of which the candidate is leading or sole author, which shows that his scientific production is already known by the scientific community.

6. Participation in scientific projects.

During the development of his dissertation, A. Ferezliev worked on a project with the Executive Forest Agency, which resulted in an implemented scientific-applied development related to the elaboration of stem form factor tables for the Douglas fir in the western Rhodopes. His active participation in the COST action FP-1001-USEWOOD "Improving Data and Information on Potential Supply of Wood Resources: A European Approach from Multisource National Forest Inventories", that was reflected in co-authoring of an article and of the section on Bulgaria in the final summary report, makes a good impression. Asst. Professor A. Ferezliev is also an active participant in an international education project, a Bulgarian-Swiss project and a Bulgarian-Slovak project within the framework of an inter-academic agreement. This shows that he is sought after as an expert and is able to be part of international scientific teams. The applicant participated in national projects only from the budget subsidy of BAS, but he was also involved as a team member in project applications that were submitted, but not funded.

7. Teaching activities (PhD student supervisor / consultant, student training, etc.)

Asst. Prof. Angel Ferezliev has over 7 years of teaching experience at the Vocational High School of Forestry, where he teaches the disciplines of erosion control, silviculture, forest inventory and management, mechanization of forestry, forest constructions, soil science. During 2008-2009, when he has already been working at the Forest Research Institute - BAS, the candidate has been involved to participate as a lecturer for training in the project "Young foresters for healthy forest - improving the practical skills of Hristo Botev Vocational High School of Forestry, Velingrad through working in a real work environment" under OP "Human Resources Development", and in 2018 has conducted specialized one-week training for members of a forestry cooperative. The facts presented show that Asst. Prof. Angel Ferezliev has extensive experience in training of specialists and students from the secondary vocational schools in the field of forestry. In recent years he has been engaged as an advisor on a MSc thesis at the University of Forestry and became a second scientific adviser on doctoral studies at the IBEI - BAS.

8. Assessment of the applicant's personal contribution.

The contributions of Asst. Prof. Angel Ferezliev in his individual works result from his own research and analysis, and I believe that the candidate has explored the issues related to his competences in the collective publications.

9. Critical remarks and recommendations.

No copies of the articles from the PhD thesis were provided to enable the jury members to assess whether and to what extent the materials submitted for habilitation did not duplicate the dissertation. The main contributions can be formulated more modestly, concretely and concisely. The applicant's desire to teach and share knowledge is commendable, but he should not forget also to continue studying and upgrading his knowledge beyond what he has learned from his university and doctoral studies. Methods of work, especially in the field of forest inventory and management, are developing at a rapid pace and the applicant's articles do not show a good knowledge and application of modern dendrobiometric methods in study and modeling of trees and stands. I would recommend to Asst. Prof. Angel Ferezliev to develop his ability to accept criticism and make it a stepping-stone for professional growth and a means to reach professional maturity as a

scientist. An indicator of such growth would be personally developed publications in prestigious scientific journals published outside Bulgaria, which are currently almost absent from his scientific production.

10. Personal impressions.

I know Angel Ferezliev as a well-meaning and open for collaboration colleague. I think that his active popularization work, which few colleagues in the scientific community are capable of, should be noted. I expect him to be more proactive and with real-life ambitions to take a leading position in the forest inventory and management field at the Forest Research Institute in the future.

11. Conclusion.

In connection with the above, I propose the candidate Asst. Prof. Dr. Angel Atanasov Ferezliev to take the academic position "Associate Professor" in the scientific specialty "Forest inventory and management" of the professional field 6.5. Forestry.

Дата 30/09/2019

Member of the Scientific Jury:

/Assoc. Prof. Dr. Tatiana V. Stankova/