



STATEMENT

Regarding the application materials for the academic position of "Associate Professor" in the scientific field 6. Agricultural Sciences and Veterinary Medicine, within the professional field 6.5. Forestry, scientific specialty "Forest Management and Inventory", educational discipline Forest Management, announced by the University of Forestry, State Gazette, No. 102, 12.08.2023, procedure code FOR-AsP-1123-115.

Candidate for the competition: Senior Assistant Professor Toma Ivanov Tonchev, PhD.

Prepared by: Prof. Petar Zhelev, PhD, Department of Dendrology, University of Forestry, in the scientific field 6. Agricultural Sciences and Veterinary Medicine, professional field 6.5. Forestry, email: petar.zhelev@ltu.bg

1. Brief Introduction of the applicant.

Dr. Toma Tonchev graduated from the University of Forestry (UF) with a Master's degree in Forestry in 1997. After a short period working as a project manager at Agrolesproject, in 1999 he joined the department of "Forest Management" department as a training organizer. Simultaneously, he conducted educational activities in the discipline of Forest Management as a part-time Assistant Professor. From 2001-2005. he was doctoral student at the Forest Research Institute – BAS, and defended his dissertation in 2007. Since 2008, he has been a Senior Assistant Professor in the Department of Forest Management, conducting training classes and educational practical training in Forest Management, Forest Inventory and Growth and Productivity of Forests.

2. Compliance of the Candidate's Submitted Documents and Materials with the Requirements According to the Regulations for the Development of Academic Staff at UF

Dr. Tonchev has submitted all the necessary documents required by the Law on the Development of the Academic Staff in the Republic of Bulgaria (LDASRB) and the Regulations for the Development of the Academic Staff at the UF. The information in the compliance report shows convincingly that he meets these requirements and in some cases exceeds them. By individual indicators, the points are as follows: for indicator A – 50 points with 50 required; for indicator B – 100 points with 100 required; for indicator C – 266.69 points with 200 required, and for indicator D – 365 points with 50 required.

3. Assessment of the Teaching and Educational Activities of the Candidate

Dr. Toma Tonchev has 9 years of experience as a part-time and 16 years as a full-time Assistant Professor. Throughout his long teaching career, he has conducted educational

activities (lectures, laboratory exercises, and educational practices) in Forest Management, Forest Inventory (for Bachelor's degrees) and Growth and Productivity of Forests (for Master's degrees) with students majoring in Forestry. Since the academic year 2022-2023, he has been the lecturer for the discipline Growth and Productivity of Forests for students in M.Sc. degree in Forestry – one of the main and compulsory disciplines for this degree.

Dr. Tonchev has participated in the updating of the curricula for the disciplines of Forest Inventory and Forest Management, as well as in the updating of the curriculum for the Forestry, Bachelor's and Master's degrees. He has supervised five diploma theses, two for Bachelor's degrees and three for Master's degrees. Moreover, he has reviewed a total of over 60 diploma theses for both educational levels. This demonstrates his commitment to both student preparation during their studies and their successful graduation..

4. Evaluation of the scientific, applied, and publication activities of the candidate

4.1. Participation in scientific, applied, and educational projects

Dr. Tonchev has provided information about participation in a total of 21 scientific, applied, and infrastructure projects. For projects up to 2013 (11 in total), a summarized official document was presented, and among the ten projects thereafter, one is international, within the 7th Framework Programme of the EU, two projects are funded by UF, six – by external sources, and one is an infrastructure project. He also participates in a COST Action – FP0603 "Forest models for research and decision support in sustainable forest management". This demonstrates impressive research activity, which has contributed to enhancing his professional qualification.

4.2. Characteristics of the published scientific results

The candidate participates in the competition with a total of 37 publications, excluding the Ph.D. thesis. One of the publications is a monograph, and one is a book based on the results of the doctoral dissertation. Ten of the publications are referenced in international databases (Web of Science and Scopus). Eighteen publications are in scientific journals not covered by the mentioned databases and in proceedings of international and national scientific conferences and symposia. Seven of the publications are chapters in collective monographs. Nine of the publications are in English and 28 in Bulgarian.

4.3. Reflection of the candidate's scientific activity in the literature (citations)

Dr. Tonchev has provided information for a total of 36 citations of 11 publications, resulting in 365 points. Thus, he significantly exceeds the minimum requirements for this indicator. The citations also show that the scientific community is familiar with his scientific work and has recognized its significance.

4.4. Contributions in the candidate's works (scientific, applied)

The report of Dr. Tonchev on his contributions is written at a high scientific level and demonstrates the candidate's erudition. His scientific and applied contributions are very precisely classified by him into three main directions: 1) organization and optimization of management and use in forests; 2) structure, growth, increment, and productivity; and 3) ecological characteristics of forest stands. Some of the contributions, especially these of the last group, are of interdisciplinary character.

The most significant scientific contributions in the field of optimizing management and use in forests are in the published monograph. The results affect three forms of management organization, and are achieved with the application of modern methods of analysis. In several publications, differentiated rotation ages are determined depending on the maturity, planting density, and the set goals. The contributions include compiled tables in connection with analyses and assessments of various forests, as well as an analysis of the dynamics of afforested and non-afforested forest areas in relation to determining the general trends of forest resources development. Significant attention is paid to Scots Pine plantations in Bulgaria, which have the largest area of all coniferous plantations, which determines their significance. The reasons for their deteriorating status are analyzed, and silvicultural approaches for their adaptive management are proposed.

The studies on structure, growth, increment, and productivity of plantations contribute new facts and relationships in this regard, mainly concerning spruce, pine, and beech stands. It is challenging to enumerate all the studied indicators and all the established facts in a single statement, but Dr. Tonchev's effort to use the latest modern methods to achieve the goals is noteworthy. Based on the results, several site index and growth tables have been developed.

The contributions with an ecological focus are related both to establishing relationships and trends in the functioning of forest ecosystems and to their health condition and the impact of negative factors, such as climate drying, pollution with heavy metals, etc. Based on the results, a classification of Pine plantations according to their ecosystem compliance level has been done.

The scientific contributions in the three directions mentioned by Dr. Tonchev have served as a basis for contributions, with the possibility of direct application for solving specific economic and management tasks. These include recommendations for differentiating the objectives of production and the rotation ages in Pine plantations, for the application of the sectional forest management method in their management, etc. Improvements in some aspects of applying the combined method, the Schmid-Haas method, are suggested, as well as modern

methods of ecosystem state analysis and determination of vulnerability zones. The composed models of plantation growth have served as a basis for recommending suitable densities depending on the average diameter and height.

A significant applied contribution is also the recommendation for using CORINE technology for mapping damaged coniferous plantations, which is relevant in the context of the condition of coniferous plantations in Bulgaria.

The brief analysis of the scientific and applied contributions reveals that Dr. Tonchev's scientific activity is significant both in terms of its amount and the quality of the conducted research, as illustrated by the numerous contributions that cannot be detailed in this statement.

5. Assessment of the Candidate's Personal Contribution.

The personal contribution of the candidate in the individual publications is undisputable, and in the publications with coauthors, it stands out clearly, as he has a well-defined set of expert knowledge and skills with which he participates in these publications.

6. Critical Notes and Recommendations

I have no significant critical notes and recommendations.

7. Personal Impressions

I have known Dr. Tonchev since 1993, initially as his teacher and then, from 1999, as his colleague at the Faculty of Forestry. He is a very good lecturer and a hardworking and precise researcher. He is respected by both the scientific community and colleagues from practice, as illustrated by his participation in many expert commissions of the Executive Forest Agency and other institutions.

8. Conclusion

Based on the analysis of the materials presented for the competition, as well as on my own impressions, I can conclude that Dr. Toma Tonchev fully meets the scientometric requirements for the academic position of "Associate Professor" according to LDASRB and the Regulations for the Development of Academic Staff at the University of Forestry, and in many cases significantly exceeds them. Therefore, I am pleased to propose him to be appointed to the academic position of "Associate Professor" in the discipline "Forest Management" in Professional domain 6.5. Forestry.

Date: 11.04.2024 г.
Sofia

Prepared by



(Prof. Petar Zhelev)