

REVIEW

on the materials submitted for participation in a competition for the academic position of "professor" in the field of higher education 3. Social, economic and legal sciences, professional field 3.7. Administration and management, scientific specialty "Economics and Management (by industry)" the discipline "Forestry management"

Candidate: In the competition for a professor, announced in the State Gazette, issue 10/04.02.2025 and on the website of the University of Forestry with procedure code FOR-P-0125-158 for the needs of the Department of Forestry and Management at the Faculty of Forestry, Assoc. Prof. Dr. Konstantin Nikolov Kolev, Faculty of Forestry, Department of Forestry and Management, participates as a candidate.

Reviewer: Doctor of Sciences Diana Ivanova Georgieva, Professor of Professional field 3.7. Administration and Management, Scientific specialty "Economics and Management (Fundamentals of Management)".

1. Brief biographical data of the candidate

1.1. Education and qualification

In 1999, 2003 and 2018 Konstantin Nikolov Kolev successively acquired the OCS "Master of Forestry Engineering" at the University of Forestry, the OCS "Master of Public Finance" at the University of National and World Economy and the OCS "Master of Statistics, Econometrics and Actuarial Science" at Sofia University "St. Kliment Ohridski". In 2001 and 2022 he specialized and acquired, respectively, certificates of professional qualification - "Specialist in Management Technologies" at the University of National and World Economy and "Mathematics Teacher", Faculty of Management of Sofia University "St. Kliment Ohridski".

In 2008 he defended his doctoral dissertation in the field of higher education 3. Social, economic and legal sciences, professional field 3.7 Administration and Management, scientific specialty "Economics and Management (by industry)" on the topic "Economic contradictions and conflicts arising from the forestry management mechanism after 1997". During the period 2005-2025, he conducted two specializations abroad and participated in 6 courses for improving his qualifications. He speaks fluent in English and Russian.

In summary, the candidate holds: 3 different master's degrees, 2 professional qualifications, 1 doctoral degree, 2 specializations abroad and 6 participations in qualification courses in Bulgaria, all of which represents a serious upgrade and development in the educational and qualification plan.

1.2. Professional career

After completing his education from 2005 to 2010, Konstantin Nikolov Kolev worked at the Institute of Forestry at the Bulgarian Academy of Sciences as a research associate of the III degree. Since 2010 until 2014 he holds the academic position of chief assistant at LTU, department "Management of resources and nature use". Since 2014, after winning a competition, Dr. Konstantin Kolev has held the academic position of "Associate Professor" at the University of Forestry currently in the Department of Forestry and Management. Since 2023, Assoc. Prof.

Dr. Konstantin Kolev has worked as a part-time associate professor at the Department of Economics, Faculty of General Economics, University of National and World Economy.

1.3. Other professional activities

Currently, Assoc. Prof. Konstantin Kolev is a member of: the editorial boards of the journal "Economic Management" and the journal "Innovativity in Modeling and Analytics Journal of Research", as well as of the scientific and organizational committee of the international scientific conference "Management and Sustainable Development"; member of the Union of Economists in Bulgaria and of the faculty councils of the Faculty of Forestry, Faculty of Forest Industry and Faculty of Business Administration (from 2014 to 2023). The professional career of Assoc. Prof. Konstantin Kolev in the educational field spans 20 years, marked by authorship of 90 publications on the problems of forestry economics and management, the valuation of investments in real assets, the analysis of company competitiveness, and the application of quantitative methods in management.

From the presented facts regarding education, qualification and professional career, it is necessary to conclude that the participant in the competition, Assoc. Prof. Dr. Konstantin Kolev, possesses the necessary professional experience and qualities to occupy the academic position of "professor" in the scientific specialty "Economics and Management (by sectors)" at the University of Forestry

2. Compliance of the submitted documents and materials of the candidate with those required by the Regulations for Academic Staff Development at the Forestry University - Sofia.

The documents and materials submitted by Assoc. Prof. Dr. Konstantin Nikolov Kolev comply with the requirements of the Regulations for Academic Staff Development (ASD) at the University of Forestry - Sofia. Familiarization with them allowed me to make the following generalizations about the candidate:

- has acquired (PhD) degree "Doctor" in the scientific specialty "Economics and Management" with diploma No. 32802, issued by the Higher Attestation Commission on 12.01.2009.
- presents a published monograph on the topic of the competition for "professor" on the subject: "Competitiveness of Forestry: Descriptive Analysis and Impact Factors", published by Avangard Prima in 2025 with ISBN 978-619-279-092-9 and reviewers: Assoc. Prof. Dr. Nikolay Neykov and Assoc. Prof. Dr. Galin Milchev.
- participated in the competition with 47 publications, including 2 textbooks. The indicated publications (excluding the two textbooks) form 467.69 points with a minimum number of 300 points for occupying the academic position of "professor" in Professional Direction 3.7 "Administration and Management" in accordance with the Regulations for the Implementation of the Act on the Development of the Academic Staff in the Republic of Bulgaria.
- presents 52 citations in scientific publications, referenced and indexed in world-renowned databases, monographs, collective volumes and non-refereed journals with scientific review, which form 475 points with a minimum number of 100 points for occupying the academic position of "professor" in Professional Direction 3.7 "Administration and Management" in

accordance with the Regulations for the Implementation of the Act on the Development of the Academic Staff in the Republic of Bulgaria.

In summary, the submitted materials for the academic position of "professor" in the Professional Direction 3.7 "Administration and Management", scientific specialty "Economics and Management (by sectors)" in the discipline "Forestry Management" fall within the scope of the competition and all of them should be included in the calculation of the indicators reflecting the fulfillment of the minimum national requirements according to the Regulations for the Implementation of the Law on the Development of the Academic Staff in the Republic of Bulgaria. The candidate in the competition for the position of "professor" fulfills all minimum requirements arising from the application of the law.

3. Assessment of the candidate's teaching and learning activities (work with students and doctoral candidates)

The candidate's teaching and learning activities as a doctoral student, chief assistant and associate professor in the departments of "Resource and Environmental Management", "Economics and Management of Resources and Environmental Management" and "Forest Management and Management" of the University of Forestry are more than 20 years. Assoc. Prof. Dr. Konstantin Kolev is the holder of six disciplines: two in the "Master" degree (Forestry Management, Innovation and Investment Management), and four in the "Bachelor" degree (Tourism Company Finance, General Economic Theory, International Economic and Monetary Relations, Economics and Management of Forestry). He is the author of the curricula of the following disciplines: "Economics and Management of Forestry", "Bachelor" degree, speciality "Business Management"; "International Economic and Monetary Relations", "Bachelor" degree, speciality "Business Management"; "Forestry Management", "Master" degree, speciality "Forestry"; "Innovation and Investment Management", "Master" degree, speciality "Business Management"; "Innovation and Investment Management", "Master" degree, speciality "Alternative Tourism Management".

In accordance with the current curricula, Assoc. Prof. Kolev develops and publishes two university textbooks. The first is single-authored and is on the subject "Forestry Management" from the curriculum of the specialty "Forestry", "Master" degree, for which the competition for the academic position "Professor" has also been announced, and the second is co-authored with Assoc. Prof. M. Tsoklinova and is on the subject "Finances of the Tourism Company" from the curriculum of the specialty "Alternative Tourism", "Bachelor" degree. The first textbook "Forestry Management" (No. E.20.1. in the list) includes 15 topics that introduce students to the main categories, principles, approaches and functions related to the management of the organization, models for forestry management and the optimal distribution of added value created in forestry. The second textbook "Finances of the Tourism Company" (No. E.20.2. in the list) also contains fifteen topics. The first four are fundamental for a lecture course in finance, including finance of a tourism company. The following topics focus on: investment and financing decisions, and more specifically the assessment of investments in financial instruments; opportunities for long-term financing of the company, the weighted average cost of capital, the nature of financial leverage, the relationship between capital structure and the value of the company, etc.

In my opinion, university textbooks fully meet the requirements for a comprehensive clarification of the topic, accessibility of the content and an appropriate combination of theory and practice.

In the period 2010 - 2025, the candidate is the scientific supervisor of 21 successfully defended graduates, 12 of whom are after acquiring the title of "associate professor" and exceeds his annual norm of classroom employment (280 hours, equated to exercises) on average per year for the period 2017/2018: - 2023/2024 by 181.71 hours. Assoc. Prof. Kolev is the scientific supervisor of two doctoral students. The first successfully defended the degree "doctor" in October 2019, and the second was discharged with the right to defend in February 2025.

The scientific authority of the candidate in the competition is confirmed by his participation in 9 scientific juries, in which he reviews doctoral students, senior assistants, associate professors and doctors of sciences. On the other hand, his many years of teaching experience and additional qualifications allow Assoc.Prof. Dr. Konstantin Kolev successful further development at the University of Forestry in the academic position of "Professor".

4. Assessment of the candidate's scientific, applied and publication activities

4.1.Participation in scientific, applied and educational projects

Assoc. Prof. Dr. Konstantin Kolev is applying for the academic position "Professor" competition with participation in three national scientific projects of significant scientific and applied significance. He is the leader of one of the projects. He has also indicated participation in one educational project. His work in the projects is related to the justification of quantitative indicators characterizing complex (multidimensional) features, construction of indices, specification of multiple regression models in dynamics and statics, analysis and interpretation of the results obtained, formulation of logical conclusions and recommendations. *The various topics of the projects prove that Assoc. Prof. Dr. Konstantin Kolev is a sought-after specialist, possessing broad fundamental knowledge, research qualities and skills for teamwork.*

4.2 Characteristics of published scientific results

Assoc. Prof. Dr. Konstantin Kolev has submitted a total of 47 publications for participation in the announced competition, including: published university textbooks – 2 pcs.; monograph – 1 pc.; published chapter in a collective monograph – 1 pc.; articles and reports published in scientific publications, referenced and indexed in world-renowned databases with scientific information – 10 pcs. (5 pcs. articles and 5 pcs. conference reports); articles and reports published in non-refereed journals with scientific review or published in edited collective works – 33 pcs. (23 pcs. articles and 10 pcs. conference-reports).

The publications submitted by the candidate can be differentiated by topic and content into two groups:

First group: economics and management of forestry

This group includes 1 monograph, 1 collective monograph, 9 articles and 5 conference reports. They quantitatively characterize the competitiveness of forestry enterprises and the sustainable management of forest areas in economic, environmental and social aspects, assess the financial efficiency of investments in real assets in the forestry sector of Bulgaria, as well as the reasons

for their insufficient size. Changes in the legislative framework over time, regulating the relations between economic entities in the wood market, are analyzed and 30-year scenarios for the management of forest areas falling within the administrative-territorial scope of specific municipalities are simulated.

I highly appreciate the independent monograph "Competitiveness of Forestry: Descriptive Analysis and Impact Factors" (No. B.3.1. in the list). It examines the competitiveness of forestry at the national level. Based on a literature study and M. Porter's diamond, a system of internationally comparable indicators characterizing the competitiveness of forestry at the national level of thirteen European countries is justified. Multidimensional statistical methods are applied to them: cluster analysis, through which the forestry enterprises of the countries are separated into homogeneous groups by level of competitiveness and the indicator contributing most to the formation of the clusters is determined; factor analysis, through which an index of competitiveness of forestry at the national level is constructed, and which allows for comparative analysis and ranking of the forestry enterprises of the thirteen countries in statics and dynamics by level of competitiveness; Data envelopment analysis (DEA), which assesses the efficiency of forest resource use in relation to the gross value added (GVA) produced in the respective forestry enterprise. Based on the multivariate analyses, recommendations have been formulated to increase the competitiveness of forestry enterprises in the thirteen European countries.

Second group: research on economic and social processes

This includes 18 articles and 11 conference reports. The emphasis is on:

- the level of digitalization, employment, quality of life and foreign direct investment (FDI) in a regional aspect in Bulgaria;
- the economic activities that should be basic and of primary importance for the development of regions;
- the efficiency of resource use with variable returns to scale;
- specification of multiple regression models and vector models with error correction, through which the influence of theoretically justified factor variables on the final consumer spending of households, economic growth, FDI, gross value added of the economic activity "Hotel and restaurant" and gross fixed capital formation is examined.

By number of co-authors, the publications are distributed as follows: independent – 14 pcs. (30%); with one co-author – 24 pcs. (51%); with two co-authors – 6 pcs. (13%) and with three or more co-authors – 3 pcs. (6%). According to the language in which they were published, 17 (36%) were in Bulgarian and 30 (64%) were in a foreign language.

In summary, in the scientific production submitted by the candidate under the competition, independent publications and those with one co-author (total 81%) prevail, as well as publications in English (64%). At the same time, the production significantly exceeds the minimum national requirements (MNR) for holding the academic position "Professor" and presents Assoc. Prof. Konstantin Kolev as an established researcher and lecturer in the field of forestry management and economics and management (by industry).

4.3 Reflection of the candidate's scientific publications in the literature (known citations)

The report on known citations after the election for the title of Associate Professor, presented by Assoc. Prof. Dr. Konstantin Kolev, includes a total of 52 publications, of which:

- 13 publications in scientific publications, referenced and indexed in world-renowned databases, namely (7 publications in scientific publications, referenced and indexed in Scopus and Web of Science; 5 publications in scientific publications, referenced and indexed in Web of Science; 1 publication in a scientific publication, referenced and indexed in Scopus.)
- 17 publications in peer-reviewed monographs;
- 22 publications in non-peer-reviewed journals.

The above facts prove that the results obtained by the candidate are known to the scientific audience, sharing research interests in the subject of the announced competition.

4.4 Contributions to the candidate's works (scientific, scientific-applied, applied)

In my opinion, the scientific production submitted for participation in the competition contains significant and original contributions to theory and practice, divided into three groups:

4.4.1. Scientific

- Two systems have been developed: a system of internationally comparable indicators determining the level of competitiveness of forestry at the national level (No. B3.1, No. D6.6, No. D7.15) and a system of indicators and metrics, determining the level of competitiveness of forestry enterprises (No. D6.2, No. E18.1, No. E20.1).
- The application of Oliver Williamson's institutional analysis has been adapted to the specifics of the Bulgarian forestry sector for the study of social and economic phenomena that have arisen in it (No. G6.10).
- The application of a system of quantitative indicators, comprehensively reflecting the process of sustainable management of forest areas in its three dimensions - economic, ecological and social (No. G7.17), has been justified.

4.4.2. Scientific and applied

- The use of a BCC model oriented towards input forest resources with variable returns to scale is argued, which allows to assess: the efficiency of their use in relation to the GVA produced in forestry (No. B3.1); the efficiency of the costs incurred for the acquisition of fixed assets (FIX) and foreign direct investment (FDI) in relation to the achieved levels of employment and labor productivity by districts in Bulgaria (No. D7.26).
- Through the application of statistical methods, indices of competitiveness of forestry at the national level, indices of competitiveness at the level of forestry enterprises and an index of

sustainable management of forest areas (No. B3.1, No. G6.2, No. G6.6, No. G7.15, No. G7.17, E18.1, No. E20.1) have been constructed.

- An approach has been developed to verify scientific hypotheses about insufficient investments in forestry in Bulgaria based on data provided through questionnaires and using the χ^2 -method (No. G6.10).

- Vector models with error correction have been specified, which allow to study the dependence between gross fixed capital formation, the effective interest rate on consumer loans, loans and savings of households in Bulgaria in the long and short term (No. G7.32, No. G7.33).

4.4.3. Applied

- The level of competitiveness of the forestry enterprises of thirteen European countries during the period 2015-2020 has been quantified (No. B3.1) and the efficiency of using the forest resources owned in relation to the created GVA in the forestry enterprises of thirteen European countries during the period 2015-2020 has been assessed (No. B3.1).

- A multiple regression model has been constructed, in which the dependent variable is the number of employed persons in the Bulgarian economy, and the regressors are the gross fixed capital formation and the average annual wage. The results obtained can be used by the managers to make rational decisions regarding the national employment policy (No. D6.3).

- The financial efficiency of an investment in poplar culture and an investment in logging equipment of a business organization with a subject of activity in the forestry of Bulgaria (No. G6.5, No. G7.6) has been determined.

- Through the application of specialization indices and regional share indices, the production of GVA by economic activities of the CIA-2008 in Bulgaria and the EU-28 has been analyzed and the economic activities for which favorable conditions for development exist on the territory of Bulgaria and the country has competitive advantages over the EU-28 member states have been determined (No. G 7.16).

- The level of sustainable management of forest areas of 35 state forest and hunting farms of the Southwestern State Enterprise (SFE), Blagoevgrad in 2017 was quantified (No. G 7.17).

I characterize the scientific and scientifically applied contributions of Assoc. Prof. Dr. Konstantin Kolev as profound and original, and some of them are also innovative in nature, which is a serious argument in support of his candidacy for the title of "professor".

5. Assessment of the candidate's personal contribution

The scientific activity of Assoc. Prof. Dr. Konstantin Nikolov Kolev, as well as the documents submitted for the competition, allow me to confidently assert that the contributions indicated in the reference are his personal work.

6. Critical remarks and recommendations

I have no significant critical remarks regarding the candidate's scientific output. I would like to make the following recommendations:

- To increase his project activity as a member of international research teams as much as possible, which would enrich his accumulated experience with up-to-date knowledge in project management.
- To develop some of his publications into independent monographs, which would contribute to wider popularization and practical application of the achieved scientific results.

7. Personal impressions

I have known Assoc. Prof. Dr. Konstantin Kolev since 2004, the beginning of his professional career. I have had the opportunity to work with him on joint projects and scientific conferences. I firmly believe that as a teacher he is responsible and demanding towards his students and towards himself, and as a researcher he is precise, ethical and sought after for work on scientific and educational projects, due to his broad scientific and research interests.

8. Conclusion

Based on the facts, arguments and summaries presented in the review, based on the results achieved by the candidate on the individual indicators, I strongly propose that Assoc. Prof. Dr. Konstantin Nikolov Kolev be elected to the academic position of "professor" in the field of higher education 3. Social, economic and legal sciences, professional field 3.7 "Administration and management", scientific specialty "Economics and management (by sectors)" in the discipline "Forestry management".

Reviewer's signature:

/Prof. D.Sc. (Econ.) Diana Ivanova/