



STATEMENT

on the materials presented for the entering a competition for an occupation of an academic position "Professor", field of higher education 6. Agricultural sciences and Veterinary medicine, 6.5 Forestry, "Forest plantation, breeding and seed production", subject "Forest plantations", announced by the University of Forestry in the State Gazette No 107/20.12.2024, code of the procedure **FOR-P-1124-153**

Applicant to participate in the competition:

Dr. Nasko Alexandrov Iliev, Assistant Professor;

Author of the statement:

Assoc. Prof. Veselka Gyuleva - Pantova, PhD, professional direction 6.5. Forestry, subject "Forest plantations, breeding and seed production", Forest Research Institute, Bulgarian Academy of Sciences, appointed member of the scientific Jury by Order No 3ПC-89/17.02.2025 of the Rector of the University of Forestry.

1. Short biography of the applicant

Nasko Alexandrov Iliev was born on 1967. After completing the full educational course in 1992 he graduated with the master degree in specialty "Forestry" of the University of Forestry, Sofia (Diploma Series B82 and No 007799). From 1993 to 1998 he worked at the National Park "Vitosha" as the Head of the Maintenance Department. In the 1997 he defended his educational and scientific PhD thesis (Diploma No 24802, dated 04.07.1997). Since 1998 Dr. Nasko Iliev held the position "Chief Assistant". At the end of 2005 he has been a lecturer at the University of Forestry on the academic position "Assistant Professor" (Diploma No 23493, dated 27.02.2006). The candidate has more than 26 years of teaching and research experience in the Department of Forestry of the University of Forestry, Sofia. Ass. Prof. Nasko Iliev has been the Deputy Dean of the Faculty of Forestry (2016-2020) and the member of the Academic Council (from 2016 to 2024). Especially over the last decade, he has gained significant organizational and administrative management experience. He is fluent in written and spoken Russian and English, Level B1 according to the Common European Framework of Reference for Languages.

2. Conformity of the candidate's submitted documents and materials with the Requirements of the Regulations for the Growth of the Academic Staff of the University of Forestry, Sofia

The documents attached (notarized copies of diplomas, CV and different inquiries, copies of all published papers, copies of published books, including the student's textbook "Forest Plantations. Forest Seed Production", ed. 2015, ISBN 978 954-332-124-7 ("E"22) and 2 others monographs) are without missing documents.

The report on compliance of the scientific production with the minimum national requirements demonstrated that the candidate has achieved and exceeds the minimum required for the individual groups of indicators. In fact, Ass. Prof. Nasko Iliev has chosen to present the habilitation thesis – monograph in the group "B" - "Production of saplings of trees and shrubs species" 2015, ISBN 978-954-332-127-8 (in total 100 points). In the group "Г", the candidate has calculated in total 270.8 points. The number of the accumulated points in the last two groups (group "Д" and in group "Е") are 855 and 338.3, respectively. Thus, the total number of points accumulated is 1614,1 and thus exceeded the minimum about 3 times.

The accompanying materials showed that Ass. Prof. Nasko Iliev has also provided very detailed information on his participation in different national and international scientific projects, the leadership of educational and applied science projects, popular science articles, the organization of and the participation in national and international conferences, the development of various regulatory documents, the participation in national councils,

working groups and committees, procedures for the awarding of educational and scientific degrees and academic positions, and many others activities.

3. Assessment of the applicant's educational activity

From 19.10.1998 up to date, according to the documents submitted, Assoc. Prof. Nasko Iliev has held all academic positions consistently. In fact, I have no direct impression of the skills of teaching and the practical activities conducted by the candidate in this competition. However, I greatly appreciate his knowledge, efficiency, expediency and responsibility in completing his research tasks in his dissertation work. Such an indirect conclusion can be drawn from the accomplishment of the various scientific and applied projects. I also appreciate the positive opinions and feedback from colleagues from different forestry companies as a teacher and scientist with ability to work in a team. I am confident in his ability to present lectures, papers and reports at various national and international events.

Since 2009, Assoc. Prof. Nasko Iliev has been very actively involved in the training and preparation of graduates for the award of Bachelor's and Master's degrees in Forestry. From 2009 up to now the number of students graduated is 24, as well as the diversity of topics developed and successfully defended (the list attached) are very strong arguments along these lines.

Assoc. Prof. Nasko Iliev is the scientific supervisor of the one successfully defended doctoral student on September 30, 2020 on the topic "Silvicultural aspects of breeding the common sycamore (*Acer pseudoplatanus* L.) in Bulgaria.

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

4.1. Participation in scientific, applied and educational projects

From the given reference it is evident that Assoc. Prof. Dr. Nasko Al. Iliev has participated in the accomplishment of the three international scientific projects: **1).** 2006-2008, "Comparative Studies on the Status of the Common Chestnut (*Castanea sativa*) in Bulgaria and Macedonia". National Scientific Fund, Bilateral Cooperation Programm: Bulgaria - Macedonia, No. BM 4/2006, 2006-2007 and 2007-2008; **2).** 2008, Evaluation, Protection and Management of the Balkan Pine (*Pinus peuce* Gris.); Operational Program Intereg III A, PHARE/CBC, Greek Ministry of Economy and Finance & EU., No. 25772/YD2156 Greece Bulgaria; **3).** 2022; Agroforestry practices in the Western Balkans for sustainable development: weak and blue countries (WORWEB), No. 2022-1-RS01-KA220-HED 000089900/01.12.2022 (By the Program: НИС-ДЕС-1258).

His participation in 10 scientific and applied projects has also been certified. The main topics are "Riparian forests", "Ecological benefits of restoration activities in various habitats", "Establishment and maintenance of experimental and demonstration forest plantations of coniferous species in the State Forest Reserve "G. St. Avramov", Yundola" and those of local species and exotics in the State Forest Reserve "Petrohan", development of the technological plans for afforestation of the village Negovan, Novi Iskar district, Sofia Municipality (SM) and others. In 2021 Assoc. Prof. Dr. Nasko Al. Iliev was actively involved in the implementation of Activity No. 6 "Dissemination of scientific results" of the Project BG05M20P001- 2.009-0034 "Support for the development of scientific capacity at the University of Forestry", funded by the Operational Program "Science and Education for Smart Growth". Demonstration activities on the topic "Technologies for the vegetative propagation of planting material" (2024) were carried out within the framework of the Rural Development Program and in implementation of Contract No. BG06RDNP001-1.004-0017 "Improvement of practical knowledge and skills in the field of agriculture and forestry".

He is the Leader of two national scientific and educational projects (Contract No. 64 dated 06.02.2014, NIS of LTU) and the project for afforestation in "Borisova Gradina" (Contract between Sofia Municipality and University of Forestry; No.COА19-ДГ55-747 dated 07.11.2019, duration 07.11-07.12.2019). Assoc. Prof. Dr. Nasko Iliev was actively working on the establishment of the Bulgarian standard with uniform rules for the production and quality of ornamental plants, as well as its approval by the European Nurserystock Association (2014) and other activities.

These all indicate that the diverse topics analyzed and the synthesis of the results achieved in order to add new knowledge and skills are inextricably linked to the thematic scope of the discipline "Forest Plantations" at the Faculty of Forestry, Department of Forestry, University of Forestry, Sofia.

4.2. Characteristics of Published Scientific Results

The results of the scientific and applied research conducted by the candidate are generally available to the scientific community through his participation in various national and international scientific forums and conferences, as well as through their publication in various international and national peer-reviewed scientific journals, including in electronic format.

During the reporting period, Assoc. Prof. Dr. Nasko Al. Iliev has independently published a book based on a defended dissertation thesis (Г6. 1.). From the provided list of materials published in scientific publications, referenced and indexed in world-renowned databases, it is obvious that the author has one publication with IF=0.395 (Г 7.7) and he is the first author. In six of the remaining publications Assoc. Prof. Nasko Iliev is the first author, too (Г 7.1, Г 7.2, Г 7.4, Г 7.11, Г 7.12 and Г 7.15) and in the next six such publications he is the second author (Г 7.8, Г 7.6, Г 7.9, Г 7.10, Г 7.13 and Г 7.16). In the remaining three publications, the applicant is the third author (Г 7.3, Г 7.8, and Г 7.14), but this does not diminish his participation in their development. In total, the candidate gains SJR=1.166 for the period analyzed.

Seventeen publications are represented by articles and reports, in non-refereed journals with scientific review or published in edited collective volumes. One of them is a personal article, published in the journal "Forestry Ideas", 2007 (Г 8.5). The candidate is in first place in the authorship team in five articles (G 8.1, G 8.4, G 8.6, G 8.9 and G 8.12) and in second position in eight articles (Г 8.3, Г 8.7, Г 8.8, Г 8.10, Г 8.11, Г 8.13, Г 8.15 and Г 8.17). As a 3rd author, he is found out in only three scientific publications, respectively - Г 8.2, Г 8.14, Г 8.16 from the list.

In the electronic documentation presented to me, three scientific popular articles are pointed out belonging to the magazine "Gora" and "Balgarska gora" (in Bulg.).

4.3. Impact of the applicant's scientific activity in literature (citations)

In the national and foreign scientific publications the noted citations by the author includes a total of 77 citations. In the section "Citations or reviews in scientific publications, referenced and indexed in world-renowned scientific information databases or in monographs and edited volumes" (Д13), 37 are pointed out. Such journals are mentioned as: Propagation of Ornamental Plants, New Forests, Forestry, Journal of Forest Research, Journal of Forestry Research, Science of the Total Environment, Acta Physiologiae Plantarum, Forestry Ideas, Nauka za gorata (Sofia) and others. The calculated total high values of the impact factor and SJR indicators (IF=19.264 and SJR=0.664) in this segment are a reliable criterion of the value of the candidate's scientific production.

The 20 citations in the segment "Citations in monographs and peer-reviewed collective volumes" (E14) and the 20 citations in the section "Citations or reviews in non-refereed peer-reviewed journals" (E15) in Bulgarian and foreign specialized scientific journals must also be pointed out.

It is noteworthy that more than 78 % (26 out of 33 publications) of the scientific output of Assoc. Prof. Dr. Nasko Al. Iliev are in English, in Scopus referenced journals with SJR and in Web of Science referenced journals with or without IF, as well as in other international scientific publications. This makes him a clearly recognizable scientist in the international scientific research space.

4.4. Contributions of the applicants' work (scientific, scientific-applied, applied)

By accepting all the scientific, scientifically applied and applied contributions indicated by the candidate in the documentation submitted to me, I allow myself to point out in shorter variant, as follows:

In the field of "*Forest seed production*": **1).** The main contribution concerns the publication of the university textbook, 2015 (E 22.1). It includes a historical background and conceptual views to emphasize the importance of afforestation and the fundamental role of seed production. The main challenges facing afforestation and those specifically facing forest seed productions are defined. Separate chapters deal with the provision of seed materials from various seed production sources, the fruiting process, the determination of harvests, seed collection, the production of forest seed materials, their

preservation and seed control. Topics on forest seed science are also included, clarifying the ecological, biological, morphological and technological aspects of forest seed supply. **2).** For the first time, the current classification of seed materials by durability, respectively storage capabilities, with the newly established groups - semi-dry seed materials and wet seed materials of tropical species, is presented. **3).** The role of breeding activities in Bulgaria in the allocation and establishment of forest seed production sources for the sustainability and productivity of the created forest crops is substantiated (Д 8.2). **4).** A contribution of practical and applied importance is the study of the established sources of seed production of *Robinia pseudoacacia* in Bulgaria (Д8.1). **5).** For the first time, a study has been made of all sources of reproductive material of the *Acer platanoides*, included in the National Register of Forest Seed Production Base in Bulgaria. All plantations and cultures included in the National Database of Forestry Areas in Bulgaria, in which the sycamore tree dominates in the composition, have been studied in order to include new basic sources of reproductive material. **6).** A scientific and applied contribution is the study of seed qualities and the nature of seed dormancy of seed materials of species of limited distribution and use in our country, with which the experience is relatively insufficient - cherry (*Prunus avium* L.) and sycamore (*Acer pseudoplatanus* L.).

In the field of "Nursery production": **1).** The main contribution is contained in the monograph "Production of seedlings of tree and shrub species" (B3.1). The publication presents the modern level of production activities and technologies in nurseries for the production of planting material used for afforestation for forest and ornamental purposes in our country. Vegetative propagation by rooting cuttings, by grafting and propagation *in vitro* as an essential element of nursery production is presented as follows: **2).** A significant contribution to our and world science and practice is the proven possibility of rooting pre-etiolated and de-etiolated shoots (Г7.15). **3).** The contribution is the results of a study on the influence of the type of auxin and its concentration, the optimal window for obtaining cuttings and the genotype on the induction of callusogenesis, rhizogenesis and the quality of the produced root system of cuttings from three cultivars ('Columnaris', 'Potentii' and 'Golden Wonder') of *Chamaecyparis lawsoniana* (Г8.7). **4).** For the first time, vegetative propagation of the common yew (*Taxus baccata* L.) was attempted and re-introduced into its natural habitat in Strandzha and Vitosha (Г8.17). **5).** The possibility of spring grafting on a dormant rootstock and summer grafting on a cutting has been proved. The best grafting is done in the summer period. When grafting a cuttings and copulating during this period, the union between the components is 100%. The best growth of the graft is in the case of budding in a T-shaped incision (Г7.1). **6).** A very good result has been obtained in the grafting of chestnut (*Castanea sativa* Mill.), (Г7.4). **7).** It has been shown that grafting by splitting, mating and budding in a lateral notch in spring and summer in maple (*Acer platanoides* L.) and its cultivars Drummondii and Faassen's Black gives a high success rate in spring (from 63.3 to 93.3%), and in summer budding is preferable to grafting. **8).** For the first time in our country, spring and autumn grafting of *Syringa vulgaris* L. and its cultivars Charles Joly and Mme Florent Stepman on rootstocks of two-year-old vegetative seedlings of *Ligustrum ovalifolium* Hassk. was accomplished **9).** A basic publication, scientific and applied contribution in this direction is Г7.3, which briefly presents the University Laboratory of Biotechnology and Molecular Genetics at the University of Forestry in Sofia, established with the support of the National Research Fund of Bulgaria. The candidate is an active participant in the infrastructure project for the establishment of the laboratory (E18.1, E20.1). **10).** The development of methods for *in vitro* propagation of mountain ash (*Fraxinus excelsior* L.) (Г 8. 10) and sycamore maple (*Acer pseudoplatanus* L.) (Г8.15) are the scientific contribution. **11).** An important scientific and applied contribution is the determination of the influence of selective herbicides on the response of seeds and vegetative seedlings and the demonstration of the possibilities of their implementation in the practice. **12).** The contribution to the updating of the regulatory framework is the participation in the working groups of the Ministry of Forestry for the preparation of regulatory documents affecting the nursery production - Regulation No. 4 of 15.02.2012 on the conditions and procedure for registration of forest nurseries, as well as for the production of seedlings in forest nurseries - state property (State Gazette, issue 17, 28.02.2012.).

In the field of "Afforestation" **1).** A significant scientific and applied contribution is the unique and largest studies of the state, growth and productivity of forest plantations of common cherry (*Prunus avium* L.) (G8.4), *Acer platanoides* (L.) (Г 7.5) and *Acer pseudoplatanus* (L.) (Г 7.11) in our country. All existing plantations in the forest territories in Bulgaria, in which the species dominate in the composition, were studied. The results allowed for comprehensive recommendations for silvicultural work with them. **2).** An important contribution is the demonstration of the fact that all three species can

form pure plantations and create sustainable pure forest crops. Schemes of 2x1.5–2 m and a density of up to 5000 pcs./ha are recommended. The potential for timber production has been determined: for 40–50 years, height 26 m, diameter 33 cm, stock 420–460 m³.ha⁻¹. **3).** An article D8.4 was published in order to popularize and summarize the main results for practitioners. *Acer platanoides* can dominate the composition in plantations with an altitude of 100 to 1000 m. The vegetation is medium-rich to rich. Soil moisture is relatively good, ranging from fresh to fresh to moist. The exposure is heterogeneous - 61% shady and 39% hot. The intensive growth in height of the species is registered both in the sub-belt of the lowland oak forests and in the sub-belt of the lowland forests dominated of *Quercus petraea*, *Fagus sylvatica* and *Abies*. The average diameter of the *Acer platanoides* at the age of 44–54 years varies from 18 cm to 30 cm (Γ 7.5). **4).** The study of the National Database of Forest Areas is the first attempt to provide a comprehensive overview of the silvicultural practice with *Acer pseudoplatanus* in Bulgaria (Γ 8.13). **5).** A scientific and applied contribution is the review of the historical overview of the afforestation in Bulgaria (in publication Γ 8.14.).

5. Evaluation of the personal contribution of the applicant

Based on the scientific achievements of Assoc. Prof. Dr. Nasko Al. Iliev, I believe that he has an obvious personal contribution, given his many years of specific research experience, knowledge and skills for precise implementation of his research tasks in a laboratory and field environment. He possesses clearly professional qualities. These qualities allow him to be one of the leading scientist and lecturer.

6. Critical notes and recommendations

I do not have any significant comments or recommendations to be written here.

7. Personal impressions

I have known Assoc. Prof. Dr. Nasko Aleksandrov Iliev since the 1990s, during which time he was developing his dissertation with great energy, hard work and ethics. I have no doubt in these qualities of his even now. I believe that he is distinguished by his broad expertise in the field of forestry, demonstrating high professionalism.

8. Conclusion

The above written gives me a reason to summarize that the obtained results and contributions from the research, teaching and expert activity of Assoc. Prof. Dr. Nasko Alexandrov Iliev meet the requirements of the LAW in the Republic of Bulgaria and the Regulations for its implementation at the University of Forestry, Sofia

I PROPOSE Assoc. Prof. Dr. Nasko Aleksandrov Iliev to obtain the academic position **"Professor"** in the subject **"Forest Plantations"**, Professional Field **6.5. Forestry**

22. 04. 2025
Sofia

Member of the Scientific Committee:

/Assoc. Prof. Dr. Veselka At. Gyuleva-Pantova/