

### REVIEW

on the materials submitted for participation in a competition for "Associate Professor" in the field of higher education 4. "Natural Sciences, Mathematics and Informatics", Professional field 4.4. Earth Sciences, scientific specialty "Ecology and Ecosystem Protection" in the discipline "Protected natural areas"

In the competition for Associate Professor, published in the State Gazette 36/29.04,2025 and on the site of the University of Forestry with the code ELA-AsP-0425-165 for the needs of the Department of "Ecology, environmental protection and restoration" at the Faculty of "Ecology and Landscape Architecture", as a candidate participate Hristina Strahilova Bancheva-Preslavska, Faculty of "Ecology and Landscape Architecture, Department of "Ecology, environmental protection and restoration".

Reviewer: Mariyana Ivanova Lyubenova, Ph.D., Professor in a Professional Field 4.3 Biological Sciences, from Sofia University / retired /

### 1. Brief biographical data for the candidate

Dr. Hristina Bancheva-Preslavska completed her secondary education at the Spanish High School "Miguel de Cervantes" (2004). She studied German at Trier University (2005). She obtained a Bachelor's degree at the University of Forestry (2009), majoring in *Ecology and Environmental Protection*, and a Master's degree (2010) in *Environmental Protection and Sustainable Development*. Within her Master's studies she attended courses at the University of Chemical Technology and Metallurgy — Bulgaria: D. A. Tsenov Academy of Economics — Bulgaria; the Flemish Institute for Technology — Belgium: and the UNESCO-IHE Institute for Water Education — France. She was also a specialization fellow at Leuphana University, Lüneburg. Germany.

In 2016 she completed a teacher qualification program at the Center for Continuing Education of the University of Forestry, and in 2017 she obtained her PhD in Ecology and Ecosystem Protection at the University of Forestry, with a dissertation entitled "Modern Approaches in the Organization of Educational Activities in Protected Areas." For the period 2011-2023 the candidate attended a wide range of 14 training courses, which provided breadth and perspective to her professional activity. Attached are 2 certificates of participation in the International Summer University of UNESCO, related to the management of biosphere reserves - in 2019 and 2022; 4 certificates from courses and trainings: on international project management, on the validation of scientific research work, on innovative doctoral training, and on intellectual property management. Attached are 6 participations in seminars and other training events - the Second and Third National Natura 2000 events; the online seminar MILIEU and a webinar dedicated to geographic information systems; the summer academy "BNE/a/Home"; and a conference at Freie Universität Berlin. Dr. Bancheva speaks 3 languages in addition to her mother tongue - German (DSH3). Spanish (DELE Superior), and English (BIG BEN Certificate). She has excellent command of Microsoft Office™ – Word, Excel, PowerPoint, Publisher, as well as website administration, WordPress, and Internet. She holds a driving license, category B. Her professional background includes work as a project assistant at the EcoCommunity Foundation: coordinator at the Association Veloevolution: intern at Overgas Inc. AD and Makmetal Holding AD (2007-2009); ecologist at Makmetal Holding AD (until 2012); and Manager of Environmental Projects (2013-2017). She also worked as a teacher at the private high school "Meridian-22" (2015-2018), and at the Spanish High School "Miguel de Cervantes" (2024-2025). She was a part-time lecturer at the Faculty of Pedagogy of Sofia University (2017-2018) and supervisor of pedagogical practice at the University of Forestry (2018-2019).

Since 2017 she has held the position of Assistant at the Department of "Ecology, environmental protection and restoration" at the University of Forestry, and since 2018 she has been a Chief Assistant at the same department.

As of 30 May 2025, Dr. Bancheva-Preslavska has accumulated 8 years, 4 months, and 7 days of employment in academic positions (Official note 4152/03.06.2025), thereby fully meeting the requirements of the competition.

Dr. Bancheva possesses good communication skills, developed through her exceptional activity — work on projects, with NGOs, in two holding companies, and through her specializations abroad. She works well in a team. Dr. Bancheva has experience in: project and human resource management organizing various events and activities for adults, youth, and children; knowledge of legislation and waste management in Bulgaria; adapting and developing educational programs for specific needs and target groups; an ecologist with experience in the private, non-governmental, and public sectors, who systematically gains and builds upon her experience.

For her exceptionally active work, Dr. Prestanska has received the following distinctions and awards: Fellow in the Exchange Program for Central and Eastern Europe of the German Federal Environmental Foundation (DBU) in 2012; Fellow in the program "Civic Education in Action" of the Federal Agency for Civic Education and the Robert Bosch Foundation for 2010/2011; First in class for the Master's degree at the University of Chemical Technology and Metallurgy in 2010; First in class for the Bachelor's degree at the University of Forestry in 2009; Honorary Award of the University of Forestry; Gold Badge "For Contribution to the Youth Innovation and Information Society" in 2008; Fellow of the Non-Governmental Environmental Fund "V.I. Vernadsky" in 2008; Mini Nobel Prize for Ecology in 2008.

# 2. Correspondence of the submitted documents and materials of the applicant according to the Rules of the Development of academic staff at the University of Forestry.

The submitted documents fully comply with the requirements of the Regulations for Academic Staff Development at the University of Forestry. Numerous other documents for additional activities are also attached and described.

# 3. Assessment of the candidate's educational and pedagogical activities (work with students and PhD students).

Chief Assistant Professor H. Bancheva-Preslavska is the instructor of six courses for Bachelor's and Master's programs. For the Bachelor's degree, she is the instructor of the following compulsory courses: "Protected Natural Areas" (specialty of Ecology and Environmental Protection – 4th and 5th year, full-time and part-time study); "Ecotourism", "Sustainable Tourism", and "Research Approaches and Methods in Ecology" (specialty of Ecology and Environmental Protection – 1st year, full-time); "Ecotourism" (specialty of "Alternative Tourism" – 3rd year, full-time), as well as the elective course "Protected Natural Areas in Bulgaria" (specialty of "Landscape Architecture" – 4th year, full-time), with a total workload of 540 hours, including practical exercises and 25 hours of teaching practice.

For the Master's degree, she is the instructor of the following courses: "Protected Natural Areas in Bulgaria" (specialty of Landscape Architecture): "Ecotourism" (specialty of Ecology and Environmental Protection, Master's program in Ecotourism): "Sustainable Tourism" (specialty of Ecology and Environmental Protection, Master's program "Environmental Restoration and Ecological Monitoring"); and "Research Approaches and Methods in Ecology" (specialty of Ecology and Environmental Protection, Master's programs "Environmental Restoration and Ecological Monitoring", "Settlement Ecology", and "Ecotourism"), with a total workload of 315 hours, including exercises.

The planned teaching load for the academic year 2024/2025 is 425 hours (of which 10 hours are extracurricular), and the average for the past five academic years (excluding maternity leave) – 2017–2024 – is 384.4 hours.

Four course syllabi have been attached and developed – three as co-author and one individually. Chief Assistant Professor Bancheva-Preslavska has served as the scientific reviewer for nine theses – six for the specialty of Ecology and Environmental Protection (three Bachelor's and three Master's) and three for the Department of Professional and Continuing Education, During 2018–2024, she has been consultant and supervisor for four theses – one Bachelor's and two Master's for the specialty of Ecology and Environmental Protection, and one Bachelor's for the specialty of Alternative Tourism.

Dr. Bancheva-Preslavska has participated extremely actively in teaching and research work, in building the University of Forestry's collaboration with other organizations, in public, organizational, and educational activities with non-governmental organizations, in conducting competitions, environmental education, and student training, among other activities.

Attached are 20 orders for participation in 11 committees - for preparing materials and reporting on the implementation of recommendations under SANK, accreditation of the doctoral program in Ecology and Environmental Protection, scientific activities at the Faculty of Ecology and Landscape Architecture, determining indicators and criteria for ranking candidates under the National Program "Young Scientists and Postdoctoral Researchers-2" (2024), accreditation of the specialty of EEP (2024), conducting State Exams - at the Center for Continuing Education of the University of Forestry and for the specialty of EEP (2018/2019), for the examination of four doctoral students' specialties (2025), for the student admission campaigns (2024/2025 and 2025/2026). Three orders are attached for her role as coordinator and mentor of first-year students from the specialty of EEP and specialty of Landscape Architecture - 2017, 2019/2020, and as academic mentor SP-phase 2 (2020). Six orders are attached for participation in the Organizational Committees and Working Groups: for conducting Open Day for the specialty of EEP - 2017/2019 and for FELA - 2023; for visits of students to the University of Forestry on World Environment Day (2023) and from Vocational High School of Ecology and Biotechnology (2025); and for conducting the EcoTriathlon competition at FELA - 2023.

Also attached are seven official notes: for organizing a student club on Ecology, environmental protection and restoration; creating and maintaining the specialty of EEP's Facebook page; organizing two public lectures at the University of Forestry; participating with a plenary report in a Round Table and conducting a "Demonstration Day" for the specialty of EEP; member of the Organizational Committee of the Second National Conference with international participation; participation in the "Student Activity Week" for the specialty of EEP; participation in the Green Academy in the cities of Ruse and Pernik under the project "Support for the Development of Scientific Capacity at the University of Forestry — 2018/2019"; organizing and conducting educational tours for responsible consumption at the University of Forestry — 2019; conducting an online seminar and youth digital exchanges for eco-education "ConsUmuway" — 2020/2021 under the Ecocentric Foundation; participation as a member of the working group under a partnership agreement between the Shelter for Humanity Foundation and the University of Forestry; organizing and conducting an information day on sustainable urban development and housing policies, and volunteer initiatives under the project Build Solid Ground at the University of Forestry.

Chief Assistant Professor Preslayska is also the contact person in the cooperation agreement between the University of Forestry and the Cleantech Bulgaria Foundation.

## 4. Assessment of candidate's scientific, scientific-applied and publishing activities

Dr. Hristina Bancheva-Preslavska is participating in the competition with: one monograph, 2 books, 24 publications, and 11 projects.

## 4.1. Participation in scientific, scientific-applied and educational projects

In her CV, the candidate indicated participation in and leadership of a total of 31 projects. In the competition for Associate Professor, she participates with activity in 11 projects 6 scientific of which 3 are international, and 5 educational.

The scientific projects were funded by the Ministry of Education and Science (1). Erasmus+ (1), the Scientific Research Fund at the University of Forestry (1), the Regional Inspectorate of Environment and Water – Veliko Tarnovo (1), and the Cross-Border Cooperation Program Balkans-Mediterranean" (2). In the completed scientific projects, she participated as an assistant, communications manager, and researcher. In the original scientific project, she participates as an ecologist.

The national educational projects were funded by the Operational Program "Science and Education for Smart Growth" and the EU (1); the Interuniversity Institute in Education Management. Sofia Municipality. Sofia Regional Education Office, and the Center for Innovation and Education at Sofia University (1); the Scientific Research Fund of Sofia University (1); the National Youth Program of the Ministry of Youth and Sports (1); and the German Federal Environmental Foundation – DBU (1). All projects have been completed. Dr H. Bancheva was the leader of 2 of them, and in the others she participated as: teacher-expert for dissemination of scientific results.

expert for dissemination of scientific results, mentor of a youth team in the thematic direction. "Integrated Network for Health and Environmental Education," and expert

Under indicator E, the candidate collects 160 points: E16. Participation in a national scientific or educational project - 60 points: E17. Participation in an international scientific or educational project - 60 points and E18. Leadership of a national scientific or educational project - 40 points.

### 4.2. Characterization of published scientific results

Dr. H. Bancheva-Preslavska participates in the competition with 32 scientific works: 1 monograph, I book, I study, 24 scientific publications, and 5 popular science publications. The publications can be classified as follows:

By type: Publications in scientific journals - 24; Publications in collections from scientific forums - 2 and Popular science publications - 5.

By significance: Articles in journals with Impact Factor (IF) – 6: No. 1. No. 10. No. 12, No. 18, No. 19, No. 23; Articles in journals peer-reviewed and indexed in Web of Science and SCOPUS – 12: No. 1, No. 4, No. 5, No. 6, No. 9, No. 10, No. 11, No. 12, No. 13, No. 18, No. 19, No. 23; Articles in journals without IF – 18: No. 2, No. 3, No. 4, No. 5, No. 6, No. 7, No. 8, No. 9, No. 11, No. 13, No. 14, No. 15, No. 16, No. 17, No. 20, No. 21, No. 22, No. 24; Reports in collections from scientific forums – 2: No. 22, No. 24 and Plenary reports – 11: No. 2, No. 10, No. 12, No. 13, No. 14, No. 15, No. 18, No. 19, No. 20, No. 22, No. 24.

Place of publication: Articles in peer-reviewed Bulgarian and foreign journals indexed in Web of Science and SCOPUS - 12: No. 1. No. 4. No. 5. No. 6, No. 9, No. 10. No. 11. No. 12. No. 13. No. 18. No. 19, No. 23; Articles in peer-reviewed Bulgarian and foreign journals not indexed in Web of Science of SCOPUS - 8: No. 2, No. 3, No. 7, No. 14, No. 15, No. 16, No. 20, No. 21: Articles in non-peer-reviewed Bulgarian and foreign journals - 4: No. 8, No. 17, No. 22, No. 24; Publications in collections from international scientific forums - 1: No. 24; Publications in collections scientific conferences, sessions, and seminars - 1: No. 22 and Publications in scientific works of universities and institutes - 2: No. 8, No. 17.

Language of publication: In Bulgarian – 12: 9 articles, 1 monograph, 1 study, 1 book and In a foreign language – 15.

Articles in journals with IF or impact rank have a total SJR of 1.361 and the following quartiles: Q2, Q3 (2), and Q4 (3). They were published in the journals: Journal of the

Bulgarian Geographical Society, Journal of Environmental Protection and Ecology, Ecologia Balkanica, and Silva Balkanica.

The articles indexed and peer-reviewed in Web of Science and Scopus, but without IF, were published in Journal of Balkan Ecology and Journal of Sustainable Development.

The remaining articles are in various journals: Management and Sustainable Development Science: 2 editions of the University Publishing House of Sofia University, dedicated to informal education; Knowledge — International Journal of Scientific Papers; Socio Brains: Fact J.; Web of Scholar Multidisciplinary Science; Vas-Verlag für Akademische Schriften: and Proceedings of Seminar of Ecology with International Participation.

Dr. Preslavska also submitted a monograph dedicated to national parks, a book based on her dissertation work, dedicated to contemporary approaches in the organization of educational activities in protected areas, and a study dedicated to an integrated approach in the management of protected sites. She also submitted 4 popular science publications and 1 brochure.

Dr. H. Preslavska actively works on disseminating scientific results and knowledge among the scientific community and the public. For the period 2018-2024, she listed 5 poster presentations and 9 conference reports, of which 2 were international and 2 had international participation. She has been a member of organizational committees of 8 scientific forums and round tables.

She listed 12 instances of expert and consulting activity (attached official notes): for the DPP "Vranchanski Balkan," the EcoCentric Foundation. Private High School "Meridian 22," Community Center "Far 1930," Faculty of Pedagogy at Sofia University. DPP "Vitosha," Ecosystem Europe Foundation and the French Embassy, Smart Start Europe – 2019, DPP "Bulgarka," DPP "Vitosha" and DPP "Vranchanski Balkan," PPMI – Lithuania and ICF, 164 Spanish High School. She is a registered trainer under the "Education for Sustainable Development" program of the organization ProActive Personnel.

The points collected under indicators A, B, and G are respectively 50, 100, and 241, for a total of 391.

# 4.3. Reflection of Candidate's Scientific Publications in Literature (known citations)

For the competition, a total of 33 citations of 26 publications were submitted, meaning that 81.2% of the presented scientific works are cited.

According to the type of citations: (D11) Citations and reviews in peer-reviewed and indexed scientific publications – 17: (D12) Citations in monographs and collective volumes – 9: (D13) Citations and reviews in non-peer-reviewed journals – 7.

The citing journals in D11 have IF and SJR of 16.466 and 1.079, respectively: 2 journals are Q1, 3 Q2, 4 Q3, and 3 Q4. Examples include Environmental Science and Pollution Research, Journal of Environmental Protection and Ecology, Sustainability, Environmental Earth Science, Forum Geographic, International Journal of Environmental Research and Public Health, Ecologia Balkanica, Journal of Balkan Ecology, and others.

The citation information confirms that Dr. H. Bancheva-Preslavska is recognized and established in the scientific community as a successful researcher. Under indicator D, the points collected are 126, distributed as follows: D11 - 85 pts; D12 - 27 pts; D13 - 14 pts.

4.4. Contributions to the candidate's work (scientific, scientific-applied, applied)
As stated by the candidate, the principal scientific domains of the submitted works are.
The current state and management of protected areas of national and international significance—comprising a monograph, one study, and 17 publications. G7.1—G7.7. G7.9. G7.10. G7.12, G7.14—G7.16, G7.18—G7.20. G7.23. Opportunities for the development of ecotonrism in protected areas and the eluboration of methodological approaches for its

implementation – including one study and 11 publications: G7.4–G7.7, G7.11, G7.12, G7.14, G7.15, G7.18, G7.19, G7.23 and Approaches to teaching ecology and environmental protection – presented in 6 articles: G7.8, G7.13, G7.17, G7.21, G7.22, G7.24.

The identified research domains are fully consistent with the theme of the competition.
Within the scientific works of Dr. Bancheva-Preslavska, 25 contributions can be distinguished
- 11 scientific, 8 scientific-applied, and 6 applied.

Scientific Contributions

4.4.1. More than 25 qualitative and quantitative methodologies for evaluating the effectiveness of management (EM) of protected areas applied worldwide have been analyzed. It has been established that qualitative methodologies are the most suitable and informative.

4.4.2. It has been found that the criteria for the management of protected areas, as defined by IUCN, are largely reflected in Bulgarian legislation. Three National Parks (NP), eleven Nature Parks (NPp), and thirty-five Protected Sites (PS) have been analyzed, and it has been established that Central Balkan NP, Bulgarka NPp, Persina NPp, and Belasitsa NPp are suitable for inclusion in the IUCN Green List. Their initiation of the inclusion procedure has been recommended.

4.4.3. If has been established that the management of national parks in Bulgaria, Romania, the Czech Republic, Germany, France, and Spain follows a common vision based on IUCN criteria.

4.4.4. A holistic approach for the sustainable management and conservation of wetlands in Bulgaria has been proposed.

4.4.5. An assessment of erosion has been carried out, treating it as a process for the formation of natural landmarks significant for the conservation of geological and biological diversity.

4.4.6. Approaches and methodologies for managing information and educational activities in protected areas have been developed.

4.4.7. The natural potential for ecotourism development in 73 sites in Northwestern Bulgaria has been assessed, and specific floristic, faunistic, and integrated routes have been proposed.

4.4.8. An analysis of visitor infrastructure at Ramsar sites in Bulgaria has been conducted, establishing the need for its expansion.

4.49. An analysis of the "Top 100 National Tourist Sites" has been carried out, establishing that more than 10% of them are protected sites—caves and rock formations under the Protected Areas Act—and that there is growing interest in them through the gamification approach, a practice for promoting cultural-historical and natural heritage:

4.4.10. The development of environmental education towards education for sustainable development has been analyzed, including the role of non-formal education and the assurance of its quality.

4.4.11. An analysis and evaluation of higher education in Bulgaria has been conducted in the context of education for sustainable development.

### Scientific-upplied Contributions

4.4.12. Legislative amendments have been proposed for more effective management of National Parks (NP) in Bulgaria:

**4.4.13.** Indicators for effective management of NP have been verified on the basis of quantitative assessment and expert opinion (scale from 1 – not applicable, to 5 – fully applicable).

4.4.1.4. A system consisting of 7 criteria. 27 indicators, and 27 standards for management effectiveness has been developed, along with a questionnaire of over 250 questions for self-assessment, qualitative analysis, and improvement of NP Directorate activities. Quantitative self-assessment every three years and qualitative self-assessment every eight years have been recommended. The criteria include national policy and legal regulation, management planning, financing, conservation significance, protection and control, rights and capacity of the administration, educational activities, tourism, science and inonitoring, and stakeholder participation.

4.4.15. The current state of protected areas in the regions of Vidin, Montana, and Vratsa (flora, fauna, and geomorphological formations), as well as 30 sites in 8 municipalities of Dobrich and Varna districts, has been assessed.

4.4.16. An analysis and evaluation of wetlands - Ramsar sites - has been carried out, with a focus on Shabla Lake and Durankulak Lake Protected Areas. Communication criteria, structured into three groups, have been developed for the effective functioning of their visitor centers.

4.4.17. Various methodological approaches for the creation of eco-trails, including sites from the

protected area network, have been developed.

4.4.18. Approaches for conducting ecotourism in protected areas, focusing on its informational and educational functions, have been developed and verified; these approaches can be applied by various organizations.

4.4.19. An approach for urban tours - eco-tours - has been developed and verified, which can be integrated into complex routes combining alternative tourism in both urban and natural environments.

### Applied Contributions

4.4.20. An analysis, supported by the activities of the National Park Directorates and the conclusions of the one-time audit of the National Audit Office (2010-2012), has confirmed that the management of NP in Bulgaria is ineffective and poses a risk to the conservation of biodiversity, due to insufficient resources, institutional problems, and lack of capacity.

4.4.21. Recommendations have been made for attracting partner organizations, increasing volunteer

engagement (e.g., with the Bulgarian Tourist Union), and ensuring continuous staff training.

4.4.22. The designation of a new Nature Park has been proposed, to include: Chuprene Reserve, Chuprene Beech Protected Area. Midzhur Protected Area, Belogradchik Rocks Protected Area, Durshin Waterfall Protected Area, Vodni Skok Protected Area, Stoto Ovtsi Protected Area, Ravensko Gradishte Protected Area, and Kopren-Rayno Buche-Kalimanitza-Devanitsa Protected Area.

4.4.23. Integrated management of Shabla Lake and Durankulak Lake Protected Areas through environmental education has been proposed along with a recommendation to update their

management plans.

4.4.24. A framework for erosion control in Bulgarian NP and NPp has been proposed, as well as an interdisciplinary approach to afforestation and anti-crosion measures for the conservation of the Melnik Pyramids Protected Site.

4.4.25. Four handbooks for environmental education, aimed at different target groups, have been developed and published.

### 5. Assessment of the applicant's personal candidate.

The candidate's personal contribution is outlined by the statistics regarding the number of coauthors and the candidate's position within the scientific team of the published materials.

Number of co-authors: Single-author - 13 works: 11 articles, I monograph, I book:

With one co-cauthor - 9 works: 8 articles, 1 study. With two co-authors - 5 works.

Dr. Preslavska is the leading author in her scientific output. She is first author in 28 of 32 scientific works, or 87.5%; she is second and third author in 2 scientific works each.

Dr H. Bancheva-Preslavska has collected a total of 677 points according to scientometric indicators, against the required 600 points from PRASRB. The excess of 77 points is distributed as follows: G = 41 points; D = 26 points, and E = 10 points; fully satisfying the requirements of the regulations and the law-

The submitted materials and information demonstrate that Dr. Hristina Bancheva-Preslavska is a highly erudite, scientifically and socially active researcher, with a strong conviction about the need for environmentally conscious education at various levels, accumulated experience and training, and a keen awareness of existing problems, in solving which she participates with inspiration and enthusiasm. Her expert, teaching, and educational activities outside the university are comparable to her significant university engagement.

### 6. Critical remarks

Technical notes regarding the submitted materials: In the folder with citations, some files are missing: 5 from D11, 4 from D12, 1 from D13; In the submitted scientific fields and contributions, in addition to the scientific works, other activities are included, which is not necessary. Different aspects of the same contribution are considered separately.

### 7. Personal impressions

They are related to the review of the candidate's doctoral dissertation, which was given an appropriately high evaluation.

#### 8. Conclusion

Based on a review of the candidate's activities and an analysis of her scientometric indicators, I propose that Dr. Khristina Strahilova Bancheva-Preslavska be elected as "Associate Professor" in the discipline "Protected Natural Areas" within Professional Field 4.4. Earth Sciences, scientific specialty "Ecology and Ecosystem Protection".

Signature of the reviewer:

Review submitted to: 19,08,2025 r.