Specific Regulations for Recruitment to the Project
regarding activities in the field of forestry at the Faculty of Civil Engineering and Environmental Sciences

*Programme*: *PROM - Short-term academic exchange - recruitment 2024*
*Project*: *PROM – Short-term academic exchange*
*Project Number*: *BPI/PRO/2024/1/00021*

§ 1
General information

1. The implementation of the PROM project at the Faculty of Civil Engineering and Environmental Sciences will be carried out using the principles of horizontal policies regarding:

a) **accessibility for persons with special needs**, including persons with disabilities and persons in a more difficult situation due to other premises (e.g. persons with low income, foreigners, refugees, etc.);
b) **equal opportunities and non-discrimination**, including respect for other persons participating in the programme irrespective of their: sex, race, colour, descent, genetic features, language, religion, beliefs, political or any other opinion, membership of a national minority;
c) **equal opportunities for women and men,** including equal treatment of both sexes;
d) **principles of sustainable development**, concerning the application of the 'do no significant harm' principle to the environment (DNSH principle) based on the assumption that no activities may worsen the state of the environment and contribute to the escalation of the climate crisis.

§ 2
The scope and subject of support

1. Support includes outgoing and incoming mobility, such as:
a) a mobility to the University of Turku (Finland) to obtain materials for a scientific article;
b) participation in FUNGITAX workshops (thematic block 'Nature to date: exploring diversity and advanced identification of fungi on dead wood').
c) visit to the Institute of Forestry Sciences (Bialystok University of Technology) to obtain material for a scientific article
d) study visit to the University of Helsinki (Finland)
e) study visit to BOKU University (University of Natural Resources and Life Sciences) in Vienna

2. The Project Participant receives financial support in accordance with § 7 of the Regulations for organization, recruitment and payment of scholarships and other forms of support under the PROM project.

§ 3
Characteristics of the target group

1. Type of Project Participant:

a) student, employee of the Faculty of Civil Engineering and Environmental Sciencesof Bialystok University of Technology;
b) doctoral student at the Doctoral School of Bialystok University of Technology;

c) a student from foreign countries in the field of science, technology or natural sciences

of higher education and science institutions;

d) employee of a foreign higher education and science institution

e) representatives of the academic staff of the Faculty of Civil Engineering and Environmental Sciencesof Bialystok University of Technology and employees of foreign higher education and research institutions.

§ 4

Criteria for qualifying participants for the Project

1. A condition for participation in the recruitment procedure is reading the 'Regulations for organization, recruitment, participation and payment of scholarships and other forms of financial support under the PROM project' and these 'Faculty Regulations for Recruitment to the Project', accepting the conditions and filling in the electronic form available on the website of the Faculty of Construction and Environmental Sciences.
2. Criteria for the eligibility of a student leaving to obtain materials for a scientific article to the University of Turku (Finland):
   a) second-cycle student at the Faculty of Civil Engineering and Environmental Sciences of Bialystok University of Technology or third-cycle student at the Doctoral School of Bialystok University of Technology,
   b) at the time of departure, have completed at least two semesters of study at Bialystok University of Technology,
   c) at the time of applying for mobility has a minimum average grade of 4.5 (in the case of second- and third-cycle students, the average grade from the summer semester of the academic year 2023/2024 is taken into account),
   d) knowledge of English at the level of at least B2, confirmed by a language exam (interview) or a valid certificate or other document:
      – Matura exam (matura certificate) at the extended level with a percentage marks: 35% and above from the written part,
      – Certificate of completion of a one-year language course at the level of at least B2, issued by a language school;
      – End of course exam at B2 level. Certificate required in Polish from the BUT Foreign Language Centre.
      – FCE certificate
      – CAE Certificate/Certificate in Advanced English/ - /regardless of the grade and date on the certificate
      – TELC certificate
      – UCJ General Language Certificate (B2 level): regardless of the date on the certificate
      – TOEIC Certification (B2 level)
   e) if there are more applicants than available places, a ranking list will be created based on the average grade. The average grade may be increased by:
      – 0.5 points in the case of membership in a Student Scientific Association operating at Bialystok University of Technology,
      – 0.5 points in the case of obtaining awards/distinctions for special scientific achievements

f) average grades and student status do not require certificates, they will be confirmed in the Dean's Office of the Faculty of Civil Engineering and Environmental Sciences by the Faculty Expert of the Faculty of Civil Engineering and Environmental Sciences (forestry),

g) knowledge of English, membership in Student Scientific Association, awards for scientific achievements must be confirmed by a certificate delivered to the Faculty Expert of the Faculty of Civil Engineering and Environmental Sciences (forestry), room 133A within the time limit indicated in the recruitment notice. Membership in the Scientific Association is confirmed in writing by the supervisor of the Association.

3. Eligibility criteria for students from foreign higher education and science institutions to participate in FUNGITAX workshops (thematic block 'Nature to date: exploring diversity and advanced identification of fungi on dead wood'):
   a) students of science, technical or natural sciences from foreign higher education and science institutions,
   b) knowledge of the English language confirmed by a certificate, certificate from a foreign higher education and science institution or a transcript of grades,
   c) providing a reference letter from home institution of higher education and science confirming the knowledge and/or practical experience in the field of mycology,
   d) final eligibility for participation in the FUNGITAX workshop will be based on submission of proof of purchase of an airline ticket/other means of transport for arrival at the FUNGITAX workshop.
4. Eligibility criteria for students from foreign higher education and science institutions to visit to the Institute of Forestry Sciences (Bialystok University of Technology) to obtain material for a scientific article:
   a) students of science, technical or natural sciences from foreign higher education and science institutions,
   b) knowledge of the English language confirmed by a certificate, certificate from a foreign higher education and science institution or a transcript of grades,
   c) providing a reference letter from home institution of higher education and science confirming the knowledge and/or practical experience in the field of mycology

5. Criteria for qualifying doctoral students from the BUT Doctoral School (discipline: forestry sciences) to participate in a study visit to the University of Helsinki:
   a) third-cycle student (Doctoral School of the Białystok University of Technology) at the Faculty of Civil Engineering and Environmental Sciences of the Białystok University of Technology, discipline: forestry sciences,
   b) knowledge of English at least at B2 level confirmed by a valid certificate or other document:
   - Advanced level secondary school leaving examination (secondary school leaving certificate) with a percentage score of at least 50% in the written part,
   - Certificate of completion of a one-year language course at a level of at least B2, issued by a language school;
   - Exam at the end of a B2 level language course. A certificate in Polish from the PB Foreign Language Centre is required.
   - FCE certificate
   - CAE certificate /Certificate in Advanced English/ - /regardless of the grade and date on the certificate
   - TELC certificate
   - University Language Certificate (level B2): regardless of the date on the certificate
   - TOEIC certificate (level B2)
   c) List of publications and/or scientific and research achievements/experience in the field of mycology,

d) Student status does not require a certificate; it will be confirmed at the Dean's Office of the Faculty of Civil Engineering and Environmental Sciences by the Faculty Expert of the Faculty of Civil Engineering and Environmental Sciences (forestry sciences),

6. Eligibility criteria for employees from foreign higher education and science institutions:
   a) a person holding at least a doctoral degree or an equivalent degree obtained abroad
   b) providing a reference letter, issued by home institution of higher education and science, confirming the achievements and/or practical experience in the field of mycology.

7. Eligibility criteria for academic staff from the Faculty of Civil Engineering and Environmental Sciences (discipline: forestry sciences):

   c) a person holding at least a doctoral degree or an equivalent degree obtained abroad
   d) with achievements and/or practical experience in the field of mycology.

8. Criteria for qualifying doctoral students from the BUT Doctoral School (discipline: forestry sciences or environmental engineering, mining and energy) to participate in a study visit to BOKU University (The University of Natural Resources and Life Sciences) in Vienna:

   c) third-cycle student (Doctoral School of the Białystok University of Technology) at the Faculty of Civil Engineering and Environmental Sciences of the Białystok University of Technology, discipline: forestry sciences or environmental engineering, mining and energy),
   d) knowledge of English at least at B2 level confirmed by a valid certificate or other document:
   - Advanced level secondary school leaving examination (secondary school leaving certificate) with a percentage score of at least 40% in the written part,
   - Certificate of completion of a one-year language course at a level of at least B2, issued by a language school;
   - Exam at the end of a B2 level language course. A certificate in Polish from the PB Foreign Language Centre is required.
   - FCE certificate
   - CAE certificate /Certificate in Advanced English/ - /regardless of the grade and date on the certificate
   - TELC certificate
   - University Language Certificate (level B2): regardless of the date on the certificate
   - TOEIC certificate (level B2)
   c) List of publications and/or scientific and research achievements/experience in the field of natural product research,
   d) Student status does not require a certificate; it will be confirmed at the Dean's Office of the Faculty of Civil Engineering and Environmental Sciences by the Faculty Expert of the Faculty of Civil Engineering and Environmental Sciences (forestry sciences or environmental engineering, mining and energy)

## § 5
## Competences acquired as a result of the support

1. A mobility to obtain materials for a scientific article to the University of Turku (Finland)

| Competencies | | |
|---|---|---|
| Knowledge | W1 | Knowledge of boreal brioflora analysis methods and their application in species diversity assessment. |

| | | |
|---|---|---|
| | W2 | Knowledge of field inventory techniques and methods of processing and interpreting ecological data. |
| | W3 | Understanding of the importance of science popularisation in society and the role of scientists as communicators of science. |
| Skills | U1 | Ability to obtain and analyze floristic data in the field and laboratory. |
| | U2 | Ability to interpret research results in the context of peatland ecology and global environmental change. |
| | U3 | Ability to interpret research results on range shifts of boreal moss and liverwort species. |
| Social competencies | K1 | Ability to cooperate in diverse, international research teams, taking into account cultural and linguistic differences. |
| | K2 | Ability to have substantive discussions about research with people from outside the scientific community. |
| | K3 | Awareness of the role of peatland research in the context of climate change and biodiversity conservation. |
| | K4 | Responsibility for transferring knowledge in a reliable and ethical manner, taking into account the diversity of the audience. |

| Criteria for the verification of the learning outcomes | | |
|---|---|---|
| Learning outcome | Verification criterion | Verification method |
| W1, W2, W3 | The participant knows the methods of analysis of brioflora species diversity and the importance of interdisciplinary work | Evaluation questionnaire |
| U1, U2, U3 | Participant created and delivered a presentation popularizing the results of scientific research | Supervisor's opinion on the presentation, Evaluation questionnaire |
| K1, K2, K3, K4 | The participant has actively participated in the team's work | Self-assessment included in the evaluation questionnaire |

2. FUNGITAX Workshops

| Competencies | | |
|---|---|---|
| Knowledge | W1 | Knowledge of mycobiota analysis methods and their application in species diversity assessment. |
| | W2 | Knowledge of field inventory techniques, laboratory methods of identification and interpretation of ecological data. |
| | W3 | Understanding of the importance of science popularisation in society and the role of scientists as communicators of science. |
| Skills | U1 | Ability to obtain and analyse mycological data in the field and laboratory. |
| | U2 | Ability to identify fungi using advanced microscopic methods. |
| | U3 | Ability to interpret research results in the context of fungal ecology and their impact on sustainable ecosystem functioning. |
| Social competencies | K1 | Ability to cooperate in diverse, international research teams, taking into account cultural and linguistic differences |
| | K2 | Ability to have substantive discussions about research with people from outside the scientific community. |
| | K3 | Awareness of the role of fungal research in the context of climate change and biodiversity conservation. |
| | K4 | Responsibility for transferring knowledge in a reliable and ethical manner, taking into account the diversity of the audience. |

| Criteria for the verification of the learning outcomes | | |
|---|---|---|
| Learning outcome | Verification criterion | Verification method |
| W1, W2, W3 | The participant knows the methods of analysis of mycobiota species diversity and the importance of interdisciplinary work. | Evaluation questionnaire |
| U1, U2, U3 | The participant performs fungal identification analyses using advanced microscopic methods. | Evaluation questionnaire |

| | | |
|---|---|---|
| K1, K2, K3 | The participant has actively participated in the team's work. | Self-assessment included in the evaluation questionnaire and final presentation. |

3. visit to the Institute of Forestry Sciences (Bialystok University of Technology) to obtain material for a scientific article

| Competencies | | |
|---|---|---|
| Knowledge | W1 | Knowledge of mycobiota analysis methods and their application in species diversity assessment. |
| | W2 | Knowledge of field inventory techniques, laboratory methods of identification and interpretation of ecological data. |
| | W3 | Understanding of the importance of science popularisation in society and the role of scientists as communicators of science. |
| Skills | U1 | Ability to obtain and analyse mycological data in the field and laboratory. |
| | U2 | Ability to identify fungi using advanced microscopic methods. |
| | U3 | Ability to interpret research results in the context of fungal ecology and their impact on sustainable ecosystem functioning. |
| Social competencies | K1 | Ability to cooperate in diverse, international research teams, taking into account cultural and linguistic differences |
| | K2 | Ability to have substantive discussions about research with people from outside the scientific community. |
| | K3 | Awareness of the role of fungal research in the context of climate change and biodiversity conservation. |
| | K4 | Responsibility for transferring knowledge in a reliable and ethical manner, taking into account the diversity of the audience. |

| Criteria for the verification of the learning outcomes | | |
|---|---|---|
| Learning outcome | Verification criterion | Verification method |
| W1, W2, W3 | The participant knows the methods of analysis of mycobiota species diversity and the importance of interdisciplinary work. | Evaluation questionnaire |
| U1, U2, U3 | The participant performs fungal identification analyses using advanced microscopic methods. | Evaluation questionnaire |
| K1, K2, K3 | The participant has actively participated in the team's work. | Self-assessment included in the evaluation questionnaire and final presentation. |

4. Study visit to the University of Helsinki

| Kompetencje | | |
|---|---|---|
| Knowledge | W1 | Knowledge of effective DNA extraction from fungi and performing PCR reactions for isolated material. |
| | W2 | Familiarisation with the method of preparing DNA amplicons for sending for reading. |
| | W3 | Learning laboratory methods for isolating and preserving corticoid fungal cultures. |
| Skills | U1 | Acquiring the skill of computer drawing of micromorphological images of fungi. |
| | U2 | Ability to perform PCR reactions for fungal DNA. |
| | U3 | Mastering advanced methods of constructing phylogenetic trees of fungi. |
| Kompetencje społeczne | K1 | Ability to cooperate in diverse, international research teams, taking into account cultural and linguistic differences |
| | K2 | Ability to have substantive discussions about research with people from outside the scientific community. |
| | K3 | Awareness of the role of fungal research in the context of climate change and biodiversity conservation. |
| | K4 | Responsibility for transferring knowledge in a reliable and ethical manner, taking into account the diversity of the audience. |

| Criteria for the verification of the learning outcomes | | |
|---|---|---|
| Learning outcome | Verification criterion | Verification method |
| W1, W2, W3 | The participant knows how to obtain fungal material for genetic testing and laboratory methods for isolating and preserving corticoid fungal cultures. | Evaluation questionnaire |
| U1, U2, U3 | The participant performs laboratory analyses in the field of PCR reactions. Combine morphological and genetic data to draw conclusions about the systematics and evolution of fungi and independently analyse phylogenetic relationships. The participant sees the possibility of using computerised methods of drawing micromorphological images in the morphology and taxonomy of fungi and comparing microscopic features between species. | Evaluation questionnaire |
| K1, K2, K3, K4 | The participant has actively participated in the team's work. | Self-assessment included in the evaluation questionnaire and final presentation. |

5. Study visit to BOKU University (The University of Natural Resources and Life Sciences) in Vienna.

| Kompetencje | | |
|---|---|---|
| Knowledge | W1 | Knowledge of white thermostability assessment using the DSF (Differential Scanning Fluorimetry) method. |
| | W2 | Introduction to the technique of immunoenzymatic tests used for quantitative and qualitative analysis of antibodies. |
| | W3 | Acquiring knowledge in the field of hydrodynamic diameter analysis of proteins using the Dynamic Light Scattering (DLS) technique. |
| | W4 | Knowledge of isolation and purification of proteins from plant extracts. |
| Skills | U1 | Acquiring the ability to assess protein thermostability using the DSF (Differential Scanning Fluorimetry) method. |
| | U2 | The ability to perform and interpret immunoenzymatic tests for quantitative and qualitative antibody analysis. |
| | U3 | The ability to analyze the hydrodynamic diameter of proteins using the Dynamic Light Scattering (DLS) technique. |
| | U4 | Ability to isolate and purify proteins from plant extracts. |
| Kompetencje społeczne | K1 | Ability to cooperate in diverse, international research teams, taking into account cultural and linguistic differences |
| | K2 | Ability to have substantive discussions about research with people from outside the scientific community. |
| | K3 | The ability to critically evaluate data and consciously interpret results in relation to the scientific objective and potential limitations of the method. |
| | K4 | Responsibility for transferring knowledge in a reliable and ethical manner, taking into account the diversity of the audience. |

| Criteria for the verification of the learning outcomes | | |
|---|---|---|
| Learning outcome | Verification criterion | Verification method |
| W1, W2, W3, W4 | The participant correctly describes the principle of DSF operation and is able to explain how to assess the thermostability of proteins, characterizes immunoenzymatic techniques used for antibody analysis, explains the basics of the DLS technique and the principles | Evaluation questionnaire |

| | | |
|---|---|---|
| | of measuring the hydrodynamic diameter of proteins, and describes the main stages of isolating and purifying proteins from plant extracts. | |
| U1, U2, U3, U4 | Participants independently perform DSF analysis and interpret protein melting curves, conduct immunoenzymatic tests along with analysis of the results, perform DLS measurements and interpret particle size distribution, as well as isolate and purify proteins from plant extracts, obtaining a preparation of appropriate purity. | Evaluation questionnaire |
| K1, K2, K3, K4 | The participant has actively participated in the team's work. | Self-assessment included in the evaluation questionnaire and final presentation. |

## § 6
## Methods of verifying the learning outcomes

1. Verification of learning outcomes of all participants will be carried out by the Faculty Evaluation Specialist and will be based on 2 methods:
a) Competency tests (CT), completed before and after the mobility, will assess the knowledge-based outcomes (e.g. W1, W2, W3, W4) indicated in the verification tables for each type of support (a mobility to obtain materials for a scientific article and workshops),
b) The Competence Growth Cards (CGC), completed before and after the mobility, will include an analysis of skills (U1, U2, U3, U4) and social competences (K1, K2, K3, K4), in accordance with the relevant tables.
2. The choice of the method will be made by the Evaluation Specialist (ES) and will be adapted to specific actions and target group whose competencies will be subject to verification.
3. Verification of the learning outcomes of people with disabilities and people with special needs will be tailored to the individual needs of the participants. If necessary, a different method than the one provided above will be prepared and used, e.g. interview, participant's self-assessment, classroom observations. The verification of the effects will include, among others, the possibility of adjusting the time and date of the assessment of the learning outcomes at a later stage, conducting the assessment in different languages, etc.

## § 7
## Final provisions

1. The Regulations shall enter into force on the date of signature and shall be valid for the entire duration of the Project.