ALTINBAŞ UNIVERSITY REGULATION ON NATURAL PRODUCTS RESEARCH AND DEVELOPMENT CENTER

PART I

Purpose, Scope, Legal Basis, and Definitions

Purpose

ARTICLE 1 -(1) The purpose of this Regulation is to set forth the procedures and principles regarding the objectives, fields of activity, executive bodies, duties and operational methods of Altınbaş University Natural Products Research and Development Centre (DÜAGEM).

Scope

ARTICLE 2 -(1) This regulation covers the provisions regarding the objectives, fields of activity, executive bodies, duties and operational methods of Altınbaş University Natural Products Research and Development Centre.

Legal Basis

ARTICLE 3 – (1) This Regulation has been drawn up based on the sub-clause (2) of the first paragraph of Article 7 and Article 14 of Turkish Higher Education Act No. 2547 of 4/11/1981.

Definitions

ARTICLE 4 -(1) As used in this Regulation, the following terms shall have the meanings specified below.

- a) Advisory Board: Advisory Board of the Centre,
- b) DUAGEM: Natural Products Research and Development Centre,
- c) Centre: Altınbaş University Natural Products Research and Development Centre,
- ç) Director: The Director of the Centre,
- d) President: Altınbaş University President,
- e) University: Altınbaş University,
- f) Administrative Board: The main internal body of the Centre that is responsible for taking decisions.

PART II

The Centre's Purpose and Fields of Activity

Purpose of the Centre

ARTICLE 5 -(1) The purposes of the Centre are:

- a) (Amended:OG-23/5/2021-31489) By keeping up to date with scientific and technological innovations in medicinal, aromatic, and industrial plants farming and that of other natural plants, to plan scientific studies in order to support natural product research, their application, teaching, manufacturing, and publication of academic papers on natural products, or to support the existing studies carried out by Altınbaş University on the field of natural product science.
- b) To perform analyses in accredited laboratories for pharmacopoeia compliance and regulatory procedures of raw materials and natural/semi-synthetic products manufactured/used in pharmaceutical, cosmetics, agriculture, and food industries, and to provide this service to public, private sector, and universities.
- c) To offer government agencies, private sector and universities chemical analyses required in research and R&D for raw materials and natural/semi-synthetic products manufactured/used in pharmaceutical, cosmetics, agriculture, and food industries.
- ç) To research and develop production technologies for raw materials and natural/semi-synthetic products manufactured /used in pharmaceutical, cosmetics, agriculture, and food industries.
- d) To determine pharmacopoeia compliance and regulatory standards for raw materials and natural/semisynthetic products manufactured/used in pharmaceutical, cosmetics, agriculture, and food industries, and to contribute to the development of related policies.
- e) To perform *in vitro* and *in vivo* effectiveness testing to determine biological and pharmacological effects of raw materials and natural/semi-synthetic products manufactured/used in pharmaceutical, cosmetics, agriculture, and food industries.
- f) To set priorities, create and develop strategies & policies to ensure that Turkey receives a larger share from global natural and semi-synthetic products market.
- g) To produce qualified staff specialised in production, development and analysis of raw materials and natural/semi-synthetic products used in pharmaceutical, cosmetics, agriculture, and food industries.
 - ğ) To offer consultancy with regard to production, development and quality control of raw materials and

natural/semi-synthetic products used in pharmaceutical, cosmetics, agriculture, and food industries

- h) To continue R&D efforts in raw materials and natural/semi-synthetic products used in pharmaceutical, cosmetics, agriculture, and food industries and to train qualified personnel to work in this field.
- 1) To compile and publish articles that will raise social awareness about raw materials and natural/semi-synthetic products used in pharmaceutical, cosmetics, agriculture, and food industries.
- i) To internationally promote Turkey and its potential for raw materials and natural/semi-synthetic products used in pharmaceutical, cosmetics, agriculture, and food industries.
- j) To collaborate with government agencies, universities, and industry to determine priority R&D areas for raw materials and natural/semi-synthetic products used in pharmaceutical, cosmetics, agriculture, and food industries.
- k) To offer seminars and short-term training programmes to stakeholders so as to raise awareness about raw materials and natural/semi-synthetic products used in pharmaceutical, cosmetics, agriculture, and food industries.
- l) To create databases for raw materials and natural/semi-synthetic products used in pharmaceutical, cosmetics, agriculture, and food industries in Turkey.
- m) To collaborate with universities, public and private institutions in order to cultivate precious plants and fungal cultures and to produce local and natural products from precious plants and fungal sources as part of Good Agricultural Practices (GAP).
- n) To develop prototype products based on the results of R&D activities focused on raw materials and natural/semi-synthetic products used in pharmaceutical, cosmetics, agriculture, and food industries in Turkey, and to apply for patents accordingly.
- o) To collaborate with public stakeholders to ensure the conservation of endemic and threatened plant and fungal species that naturally grow in Turkey as genetic resources.
- ö) When necessary, to send personnel abroad to ensure technology and "know-how" transfer for strategic positions where there is a shortage of qualified personnel in Turkey.
- p) To use reverse-engineering methodologies in order to develop new domestic products and to improve the existing properties of raw materials and natural/semi-synthetic products used in pharmaceutical, cosmetics, agriculture, and food industries in Turkey.

Areas of activity of the Centre

- **ARTICLE 6** -(1) a) (**Amended:OG-23/5/2021-31489**) To keep up to date with the latest technological advances so as to improve the research and production of medicinal, aromatic, and industrial plants and other natural plants in Turkey, to apply modern cultivation and breeding methods, to develop new varieties, to produce solutions for local agricultural problems and to participate in agricultural activities with stakeholders in order to put these solutions into practice.
- b) To generate internal and external funds to create the infrastructure (building, machinery-equipment) required for DÜAGEM's R&D activities, and to make these funds available to researchers.
- c) To establish and develop laboratories and research environments in order to continue R&D activities in the fields deemed necessary by DÜAGEM.
- ç) To identify government agencies, industrial organisations, universities, and other national/international stakeholders and collaborate with them in priority research fields determined by DÜAGEM.
 - d) To produce qualified R&D personnel in the priority research fields determined by DÜAGEM.
- e) To offer product/raw material chemical analysis services to government agencies, industry, universities, and other national/international stakeholders in line with the priority fields determined by DÜAGEM.
- f) To offer R&D services in product/raw material development to government agencies, industry, universities, and other national/international stakeholders in line with the priority fields determined by DÜAGEM.
- g) To offer R&D services in natural product/raw material production to government agencies, industry, universities, and other national/international stakeholders in line with the priority fields determined by DÜAGEM.
- \S) In line with the priority fields determined by DÜAGEM, to offer consultancy services to government agencies, industry, universities, and other national/international stakeholders regarding in natural product/raw material production, quality control and R&D.
- h) To determine standards for strategic natural products/raw materials in line with the priority fields determined by DÜAGEM, to update existing standards, to share the updated standards with government agencies that publish Pharmacopoeia and set registration criteria.
- 1) To create prototype products made of new/original products/raw materials developed by DÜAGEM, to obtain patents for these prototypes and to make efforts to ensure that these patents are used in the industry.
 - i) To develop databases for the local and original products developed by DÜAGEM and for the original

products that are produced and/or used as raw materials in Turkey and that are identified in Turkey's agricultural literature. To make these databases available to researchers.

- j) To offer seminars and trainings to industry, public and university stakeholders.
- k) To hold various events to promote Turkey and its potential about natural products manufacturing.
- l) To compile and publish articles, journals that will raise public awareness of raw materials and natural/semi-synthetic products used/ manufactured by DÜAGEM in pharmaceutical, cosmetics, agriculture, and food industries.
- m) To train qualified personnel specialized in production, R&D and analysis of raw materials and natural/semi-synthetic products used/manufactured by DÜAGEM in pharmaceutical, cosmetics, agriculture, and food industries.
- n) To determine strategies and priority areas and to develop policies regarding these areas, so that Turkey can get a larger share from the world market for raw materials and natural/semi-synthetic products used in pharmaceutical, cosmetics, agriculture, and food industries.
- o) Either individually and/or in collaboration with partner universities, public and industrial stakeholders, to perform in vitro and in vivo effectiveness testing to determine biological, pharmacological, and toxicological effects of raw materials and natural/semi-synthetic products manufactured/used in pharmaceutical, cosmetics, agriculture, and food industries.
- ö) DÜAGEM collaborates with universities, public and private institutions to sustainably provide the raw materials of local herbal and fungal products in Turkey and to cultivate valuable plant and mushroom cultures for production and research purposes as part of Good Agricultural Practices (GAP).
- p) DÜAGEM collaborates with public stakeholders to ensure the conservation of endemic and threatened plant and fungal species that naturally grow in Turkey as genetic resources.
- r) When necessary, DÜAGEM sends personnel abroad to ensure technology and "know-how" transfer for strategic positions for which there is a shortage of qualified personnel in Turkey.
- s) DÜAGEM uses reverse-engineering methodologies in order to develop new domestic products and to improve the existing properties of raw materials and natural/semi-synthetic products used in pharmaceutical, cosmetics, agriculture, and food industries in Turkey.
- ş) To perform other duties about R&D centres as set forth in the provisions of Turkish Legislation on Higher Education Institutions.

PART III Governing Bodies of the Centre and Their Duties

Governing Bodies of the Centre

ARTICLE 7 - (1) The governing bodies of the Centre are:

- a) Director.
- b) Executive Board.
- c) Advisory Board.

Director

- **ARTICLE 8** -(1) The Director is appointed by the University President for a period of three years from among the full-time faculty members of the University who are specialised in disciplines that are associated with those studied by the Centre. The Director whose term of office has expired can be reassigned.
- (2) The Director shall choose two people from among the teaching staff as vice directors and submit these selected candidates for the President's approval.
 - (3) The Director is a natural member of the DÜAGEM Executive Board.
- (4) In the absence of the Director, Vice Directors or one of the members of the Executive Board shall act on his/her behalf.

Director Roles and Responsibilities

ARTICLE 9 - (1) The roles and responsibilities of the Director shall be as follows:

- a) To manage and to represent the Centre.
- b) To ensure that the activities of the Centre are carried out in line with the objectives specified in Article 5 and to provide the necessary coordination.
- c) To call an Executive Board meeting upon approval from the University, to set the agenda for the meeting and to ensure that the meeting decisions are properly implemented.
- ç) To prepare the annual activity report and annual work programme of the centre, to put it into practice after consultation with the Executive Board.
- d) When deemed necessary by the Executive Board, to consult with the Advisory Board regarding matters that fall into the responsibility of the Centre and to present the advisors' opinion to the Executive Board.

- e) To check and guide the works carried out by the units of the Centre in line with the Centre's objectives and responsibilities.
- f) To ensure the effective operation of the Centre and its units and take the necessary measures to avoid any disruptions.
 - g) To monitor and supervise the projects carried out by the units of the Centre.
- ğ) To ensure that the Centre maintains strong relations and cooperation with domestic and foreign stakeholders.
- h) To ensure that the machinery and equipment allocated to the use of the Centre are used effectively and efficiently by the Centre's units.
 - 1) To perform other duties set forth in the provisions of the relevant legislation.

Executive board

ARTICLE 10 – (1) The Executive Board of the Centre shall be chaired by the University President.

- (2) The Executive Board shall consist of a total of nine members, namely the President, the Chair of the Board of Trustees, the Director of the Centre, and the Heads of the Centre's Units.
- (3) The term of office of the Executive Board members shall be three years. A member whose term has expired can be reassigned.
 - (4) Vice Directors may attend Executive Board meetings, but they shall not have voting rights.
- (5) The Executive Board shall meet with absolute majority upon the invitation of the Chair, and decisions shall be made by simple majority vote.
- (6) In the absence of the Chair of the Executive Board, the Director of the Centre shall act on his/her behalf.
 - (7) While performing its duties, the Executive Board may establish sub-committees when needed.
- (8) The Executive Board shall hold regular meetings 4 times a year. If deemed necessary, the Executive Board may convene extraordinarily upon the call of the Chair.

Executive Board Roles and Responsibilities

ARTICLE 11 – (1) The roles and responsibilities of the Executive Board shall be as follows:

- a) To review the Centre's annual report and annual work programme.
- b) To make decisions regarding the matters specified in Article 6 within the framework of the purposes specified in Article 5.
- c) To review the Centre's annual report and annual work programme, which shall be prepared and presented by the Director.
- ç) To discuss the annual budget draft of the Centre, which shall be prepared and presented by the Director, and submit it for the approval of the Board of Trustees.
- d) To assist the Director in identifying the recruitment needs of the Centre, and in establishing the units of the Centre and the research groups.
- e) To assist the Director in establishing cooperation with public and private sector organizations and individuals related to the areas of the interest of the Centre.
- f) To identify the stakeholders working on natural products; to assess and carry out collaboration with these stakeholders.
- g) To assess collaboration proposals about natural products, forward these proposals to the relevant committees or units of the University, ensure that the principles of such collaboration are mutually implemented by all parties.
- ğ) To seek the opinion of the Advisory Board when deemed necessary and to consider the recommendations of the Advisory Board.
 - h) To conduct research and create projects in priority/strategic fields of natural products.
- 1) To make decisions about training qualified R&D personnel in the field of priority natural product research at home/abroad.
 - i) To make decisions on the monitoring and assessment of the work performed by the units of the Centre.
 - j) To work to create and implement national strategic plans and policies for the Centre.

Advisory Board

ARTICLE 12 – (1) The Advisory Board shall be chaired by the University President. The members of the Board shall be appointed by the University President upon the recommendation of the Centre Director from among the following candidates: people with experience in natural products and who conduct research on natural products and who also can serve as consultants when necessary, full-time faculty members of Altınbaş University or full-time faculty members from other universities, representatives of public and private sector institutions and organizations engaged in same/similar activities to those of the Centre.

The Advisory Board shall consist of eight members, four of whom shall be faculty members, two from government agencies and two from private sector organisations engaged in same/similar activities to those of the

Centre. The Advisory Board shall ordinarily convene at least once a year or extraordinarily at the call of the University President, and decisions shall be made by absolute majority of the members.

Advisory Board Roles and Responsibilities

ARTICLE 13 – (1) The roles and responsibilities of the Advisory Board shall be as follows:

- a) To offer opinions, suggestions and comments regarding the activities and the purposes of the Centre to the Director and the Executive Board.
- b) To form opinions on the matters referred by the Centre Director and the Executive Board and to submit them to the Centre Director.

Centre's units and research groups

ARTICLE 14 - (1) In line with the purposes set forth in Article 5 and the Centre's research and training activities, Units and Research Groups may be formed, as deemed necessary, upon the proposal of the Director and the approval from the Executive Board. A required number of personnel with the required qualifications can be employed in these units, upon the proposal of the Director and the approval from the Executive Board.

PART IV Miscellaneous and Final Provisions

Spending Authority

ARTICLE 15 -(1) Spending Authority is granted to the University President who may partially or fully transfer his/her authority to the Director for making expenditures from the Centre's fund source.

Staff Recruitment

ARTICLE 16 - (1) The academic, technical, and administrative staff of the Centre shall be appointed by the University President in accordance with Article 13 of Turkish Higher Education Act No. 2547.

Situations that are not governed by the provisions of this regulation

ARTICLE 17 -(1) Without prejudice to the powers of the Board of Trustees, other relevant legislation and University Senate's decisions shall apply to situations that are not covered by this Regulation.

Effective Date

ARTICLE 18 – (1) This regulation shall become effective the day following its publication.

Execution

ARTICLE 19 -(1) The provisions of this Regulation shall be executed by the President of Altınbaş University.