

Fundo para o Desenvolvimento das Ciências e da Tecnologia

## Funding Scheme for Scientific Research and Innovation

#### I. **Objectives**

To align with the policy address of the Government of the Macao Special Administrative Region, the Science and Technology Development Fund (hereinafter referred to as the "FDCT") has launched the Funding Scheme for Scientific Research and Innovation (hereinafter referred to as the "Scheme") in accordance with the relevant provisions of the current Public Financial Aid System of the Macao Special Administrative Region, the Statutes of the Fund for the Development of Science and Technology, and the Funding Regulations of the Science and Technology Development Fund. The Scheme aims to assist local research institutions and researchers in launching all kinds of in-depth research projects, enhancing the scientific research strength and continue cutting-edge original innovation ability in Macao, and maintain the leading position of Macao's dominant discipline. Besides, it promotes the industry-university-research partnership, facilitates the production of application-based research findings, and improves the contribution of scientific and technological innovation to social and economic development in Macao.

#### **Types of Application** II.

Projects are divided into three types base on applied amount:

1. Type A: for research projects conducive to enhancing



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scientific research strength and cutting-edge original innovation ability, with funding amount applied not exceeding MOP 3,000,000.

- 2. Type B: for research projects with application-oriented scientific research findings, with funding amount applied not exceeding MOP 3,000,000;
- 3. Type C: for research projects that help solve technical needs of enterprises listed in the Application Guideline, with funding amount exceeding MOP 3,000,000, but not exceeding MOP 5,000,000.

## III. Target Group and Eligibility for Application

Entities that fulfill any of the following conditions are eligible to submit application:

- 1. Local higher education institutions under the supervision of the Macao SAR Government.
- 2. Private non-profit organizations registered in the Macao SAR.
- 3. Researchers engaged in R&D activities in the Macao SAR.

## IV. Application Period

1. Types A and B:

1st round: March 22 to April 22, 2024

2<sup>nd</sup> round: September 9 to October 9, 2024

2. Type C:

Pending



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## V. Type and Scope of Funding

- 1. The funding type of the Scheme is non-reimbursable.
- 2. Funding scope: The proposed project shall be in line with the purpose of FDCT and the objectives of the Scheme.
- 3. Funding Priorities:
  - 1) To facilitate the industry-university-research collaboration in Macao, priority goes to Types B and C in case of limited budget.
  - 2) For Types B and C, priority goes to the research projects that align with the Second Five-Year Plan for Economic and Social Development of the Macao Special Administrative Region (2021-2025), the Development Plan for Appropriate Economic Diversification of the Macao Special Administrative Region (2024-2028), the Policy Address for the Fiscal Year 2024, and related planning and programs of Guangdong-Macao In-Depth Cooperation Zone in Hengqin, etc., especially those that can promote scientific research and industrial development in the fields such as Chinese medicine, integrated circuits, electronic components, Internet of Things, big data, artificial intelligence, new energy, space science, advanced materials and biomedicine.
  - 3) Priority goes to partnerships with enterprises in Macao or Hengqin, especially those that have been certified



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under the *Technology Enterprises Certification*Program by the Economic and Technological

Development Bureau (DSEDT).

#### VI. Self-owned Investment

- 1. For Types A and B: in case of collaboration with a commercial entrepreneur or commercial enterprise, such commercial entrepreneur or commercial enterprise shall provide the self-owned funds no less than 10% of the amount funded by FDCT. The self-owned investment shall meet the conditions of "Eligible Expenditures" prescribed in Article VIII.
- 2. For Type C: the project shall be implemented in collaboration with a commercial entrepreneur or a commercial enterprise, such commercial entrepreneur or commercial enterprise shall provide the self-owned funds no less than the amount funded by FDCT. The self-owned investment shall meet the conditions of "Eligible Expenditures" prescribed in Article VIII.

## VII. Application Guideline

The Administrative Committee of FDCT prepares the Application Guideline according to the technical direction, research objectives, technical needs, technical indicators, research period, and other specific details of the Type C projects.



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## VIII. Eligible Expenditures and Ineligible Expenditures

- 1. Eligible expenditures include:
  - (1) Personnel expenses incurred for project implementation.
  - (2) Expenditures on new machinery and equipment acquired by any means exclusively for the purpose of project implementation.
  - (3) Costs of consumables, reagents and equipment maintenance, and other expenses generated from project implementation.
  - (4) Direct costs of patent application.
- 2. Ineligible expenditures include, but are not limited to:
  - (1) Expenses for the establishment of an entity.
  - (2) Expenditures of personnel other than those specified in paragraph 1 of this article.
  - (3) Utilities, telephone fees and other similar expenditures.
  - (4) Hospitality costs.
  - (5) Acquisition of vehicles, except for experimental purposes.
  - (6) Expenses of constructing, acquiring, and amortizing immovable property.
  - (7) Amortization of expenses for new machinery and equipment not covered by paragraph 1 of this article.
  - (8) Other expenses specified in the *Funding Agreement* as ineligible.

## IX. Application Documents

The application documents shall include the following data:



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- 1. Identifying particulars and relevant supporting documents of the applicant.
- 2. Certificates proving that the applying entity is not in arrears with tax and social security contributions (if any) in the Macao SAR issued in the recent 3 months.
- 3. Letters of introduction or recommendation issued by reputable entities in the fields of science, technology and innovation.
- 4. Data on other projects funded by public funds and other pending applications submitted by the same applicant for funding purposes.
- 5. Identity information and resumes of the principal investigator and members of the project team, with data on the time allocated to the implementation of the project by each person.
- 6. An application proposal with detailed description of the project. The detailed amounts of project budget shall be specified in the application proposal.
- 7. Statement of responsibility for the project.
- 8. A cooperation agreement or memorandum signed with the partner (if any).

## X. Application Submission

1. Applying entities having electronic signatures shall submit the application documents through the Online Application System of FDCT;



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2. In addition to submitting the application documents through the Online Application System of FDCT, applying entities not having electronic signatures shall download the application documents and submit them to FDCT after affixing signatures and seals on or before the deadline.

#### XI. Formal Examination

- 1. FDCT conducts a formal examination after the deadline of application to check whether the relevant documents are correct and complete and examines whether the application fulfils the conditions for receiving funding.
- 2. FDCT may require the applying entity to submit additional documents within 15 days as needed.
- 3. Applications that fall under any of the following circumstances will not be accepted for the review process.

  FDCT will reject such applications and provide notification through a letter of notification:
  - (1) The applying entity does not meet the requirements of Article III of the Scheme.
  - (2) The self-owned investment (if any) does not meet the requirements of Article VI of the Scheme.
  - (3) The application documents do not meet the requirements of Article IX of the Scheme.
  - (4) Several funding applications are submitted for the same project concurrently or the same project has been previously funded by FDCT.



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- (5) The number of research projects undertaken concurrently by the principal investigator exceeds the maximum number of ongoing projects allowed as required by FDCT.
- (6) The principal investigator is not eligible for submitting a new funding application.
- (7) The applicant is included in the list of compulsory collection and overdue return of FDCT.
- (8) The applicant fails to supplement and correct relevant data after being notified or the submission is overdue.
- (9) The applicant violates the existing laws and regulations or fails to protect the safety and legitimate rights and interests of participants.

#### XII. Assessment Methods and Criteria

- 1. Before accepting an application, the Administrative Committee of FDCT shall invite five to seven advisors from the list of project advisors to form the Project Advisory Committee.
- 2. The application documents that may enter the review process will be submitted to the Project Advisory Committee formed by FDCT for review according to the review elements and criteria in the following paragraph.
- 3. Key considerations will be given to the followings:
  - (1) Competence of the applying entity, including: R&D team and research basis, qualifications and quantity of



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team members, research conditions, and cooperative research.

- (2) Project planning, including: assessment of work plan, soundness of budget, and project feasibility.
- 4. For Type A, it shall also consider the scientific value and cutting edge, including innovativeness and cutting edge, research findings and academic value, and assessment of research methods.
- 5. For Type B, it shall also consider the assessment of technologies and research findings, including technical level, application prospect, and real-life application.
- 6. FDCT may conduct site inspection to verify the research conditions of the applying entity, interview with the project team and partners (if any) as necessary.

## XIII. Funding Approval

- 1. For funding applications not exceeding MOP 1 million, the Administrative Committee of FDCT will make a decision after giving full consideration to the opinions and the relevant scores (if any) of the Project Advisory Committee, and the opinions of external peer experts (if any).
- 2. For funding applications exceeding MOP 1 million, the Administrative Committee of FDCT will prepare a submission for review by the Trustee Committee of FDCT after giving full consideration to the opinions and the relevant scores (if any) of the Project Advisory Committee, and the



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opinions of external peer experts (if any). After being reviewed and approved by the Trustee Committee of FDCT, the relevant application will be submitted to the supervisory entity for approval within the scope of its authority.

- 3. The funded entity shall sign the *Funding Agreement* accompanying the letter of grant within the time limit, stating that the funded entity is aware of and will comply with the decision on the grant as stated in the letter of grant.
- 4. The funds will be released in phases as described in the *Funding Agreement*.

## XIV. Funding Amount and Calculation

- 1. The total funding amount of FDCT shall not exceed MOP 160 million.
- 2. The funding ceiling for each project in different types is referred to Article II.
- 3. The funding amount granted by FDCT shall not be higher than the amount of funding applied.

## XV. Funding Duration

The Scheme has a maximum funding duration of three years.

## **XVI.** Requirements for Project Findings

1. For Type A, the expected project findings, not limited to academic or applied research findings, may include papers, monographs, research (consultation) reports, patents, talent



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cultivation, software, hardware (prototype, mock-up), technical standards, formulas, new materials, new technologies, etc.

2. For Types B and C, the expected project findings shall include software, hardware (prototype, mock-up), technical standards, formulas, new materials, new technologies, etc., and specify the potential economic or social benefits after the utilization of the project; upon project conclusion, the expected TRL of the Type B projects shall be TRL 4 or above, and the expected TRL of the Type C projects shall be TRL 5 or above.

## **XVII. Reports and Agreed-upon Procedure Reports**

- 1. The funded entity shall submit the annual report on the progress of project research and a final report for annual and final assessments by FDCT.
- 2. When the cumulative amount of funds granted under the Scheme reaches or exceeds MOP 1 million in the current year, the funded entity shall engage certified public accountant (CPA), certified public accountants (CPAs), accountant who can provide accounting and tax services, and accounting company which can provide accounting and tax services to carry out the agreed-upon procedures and prepare reports.
- 3. The funded entity shall submit the annual report by the deadline set out in the letter of grant.



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4. The funded entity shall submit the final report and the Agreed-upon Procedure Report as required within ninety days of the project completion date.

## **XVIII.** Obligations of Funded Entity

The funded entity shall fulfill the following obligations:

- 1. Accept the supervision and cooperate with FDCT in monitoring the use of funds, including the inspection of relevant revenues and expenditures and financial conditions, and agree that FDCT has the right to record in writing, filming, photography and other forms throughout the project process, as well as the permanent free use right of all relevant outputs.
- 2. In any publicity activities, press releases and promotional materials related to the project, indicate that the project is "supported by the Science and Technology Development Fund of the Macao SAR" or "Support Institution: Science and Technology Development Fund of the Macao SAR", and report to FDCT for filing.
- 3. Agree that FDCT shall publish the basic data, project summary and publicly available research findings of the funded project on the website of FDCT and other public documents.
- 4. Provide valid and authentic documents and make a declaration.



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- 5. Prudently and rationally plan and organize the funded project.
- 6. Comply with the terms set out in the *Funding Agreement* signed with FDCT.
- 7. Submit the report referred to in the preceding article on time, and if the report cannot be submitted on time due to force majeure or other reasons not attributable to the funded entity, FDCT shall be notified within seven working days from the date of occurrence of the relevant fact.
- 8. Use the funds exclusively for the designated purpose.
- 9. Refund the funds that were not used for their intended purpose.
- 10. Projects funded by FDCT shall not accept funding from other public funding schemes or programs.
- 11. Ensure that the content of the funded project and the project implementation procedures do not violate the law, nor do they infringe any rights of others.

## XIX. Consequences of Violation of Obligations

If a funded entity violates the obligations set forth in the preceding article, FDCT may make the following decisions depending on the nature and severity of the violation of obligations by the funded entity:

1. For the funds that have been granted but not yet released, the release shall be suspended or appropriate restrictions shall be imposed when calculating the actual release amount.



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- 2. Cancel the funds already granted in whole or in part, and require the funded entity to refund the relevant funds.
- 3. Include the involved principal investigator in the Violation List, and deny the funding application submitted by the involved principal investigator within one year.
- 4. No funds shall be granted.

## **XX.** Circumstances That May Lead to Penalties

- 1. The consequence referred to in paragraph 1 of the preceding article shall apply in particular in the case that the funded entity violates the provisions set forth in paragraphs 6-8 of Article XVIII.
- 2. The consequences referred to in paragraphs 2-3 of the preceding article shall apply in particular in the following cases:
  - (1) The funded entity violates the provisions set forth in paragraph 5 of Article XVIII, and causes serious risks or damage to participants or public interests, especially public safety or social order;
  - (2) The funded entity intentionally violates the obligations set forth in paragraphs 1-4 and 6-8 of Article XVIII, which is not a slight negligence judged by FDCT;
  - (3) The funded entity violates the provisions set forth in paragraphs 9-11 of Article XVIII.
- 3. If the final report of project is deemed as non-compliant in accordance with Article 45 of the *General Guidelines for*



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Project Management of the Science and Technology Development Fund, FDCT has the right to impose penalties in certain circumstances in paragraph 3 of the preceding article on the involved principal investigator.

4. The consequence referred to in paragraph 4 of the preceding article shall apply in particular in the case that the funded entity violates the provisions set forth in paragraph 9 of Article XVIII or Article XXI while applying for project funding.

## XXI. Return, Refund and Compulsory Collection of Funding

- 1. If the funding is canceled in whole or in part, the funded entity shall refund the amount received within the notified period.
- 2. If the funded entity fails to return the funding balance or the funding amount that shall be refunded to FDCT within the specified period, the Financial Services Bureau shall impose compulsory collection in accordance with the provisions of tax enforcement procedures.

## **XXII. Supervision**

- 1. FDCT has the authority to monitor compliance with the Scheme, particularly to oversee whether the funded entity utilizes the approved funding for the designated purposes as determined in the grant decision.
- 2. To perform its supervisory functions, FDCT has the right to:



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- (1) Require the funded entity to provide necessary data and assistance for project follow-up and spot checks.
- (2) Engage a professionally qualified third party to audit the accounts of funded projects.

## XXIII. Dispute

The applicant may dispute the decision in accordance with the provisions of the *Administrative Procedure Code*.

#### XXIV. Maintain Communication with Other Government Entities

- 1. To ensure the proper allocation and utilization of public funds, FDCT may check with other government entities for relevant application information provided by applicants.
- 2. When necessary, the competent department has the right to access, audit, or verify the authenticity of the data submitted by applicants and whether the procedures for supervising the use of public money are appropriate. Applicants are required to respect, fully cooperate with, and provide real-time assistance to the personnel of relevant competent departments in their investigation work, and promptly provide and present relevant financial statements, receipts, and other documents.

## XXV. Processing of Personal Data

The personal data in the application documents are only used by FDCT for processing and approving funding applications. To



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facilitate the approval of funding applications, applicants are required to consent to the transfer of data contained in the application documents by FDCT to other entities and to distribute it to the Project Advisory Committee for evaluation purposes.

#### **XXVI.** Other Notes

- 1. All application data shall be used for the purpose of the Scheme only. Applicants shall ensure that the documents and data submitted are accurate and error-free. Once submitted, they will not be returned.
- 2. Any matter not covered in the Scheme shall be governed by the current laws: the Public Financial Aid System of the Macao Special Administrative Region, the Statutes of the Fund for the Development of Science and Technology, the Funding Regulations of the Science and Technology Development Fund, and the Guidelines for the Inspection of Funded Activities or Projects, the General Guidelines for Project Management of the Science and Technology Development Fund and the Guidelines on Agreed-Upon Procedures for Scientific Research Projects issued by the Public Assets Management and Supervision Bureau (DSGAP) of the Macao SAR, as well as the Funding Agreement signed after project approval.
- 3. For information regarding the Scheme, applicants may visit the office of FDCT to request it in person or access the website (https://www.fdct.gov.mo/) to download the relevant



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information.

- 4. If the content of the application involves any unlawful infringement of the rights of others, the applicant shall bear all responsibilities. FDCT also reserves the right to pursue legal actions against the applicant.
- 5. Making false statements will not only result in the loss of eligibility for the application but may also entail other legal consequences.
- 6. FDCT reserves the right to revise and interpret the aforementioned content.