



Terms of Reference Frontier Science 2019

NOTE: This document summarizes and highlights key elements of the Terms of Reference that are relevant for the evaluation of proposals

If you have any questions or problems with the online evaluation system, please contact the Technical Support Center from 09:00 to 20:00, calling **(52) 55 5322 7700** ext. **6128**, or to the email address: soporte_icb@conacyt.mx

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Introduction

This document expands and sets the rules and guidelines that will regulate the participation of those interested in proposing projects in their different phases of execution, from the presentation of proposals, the establishment of the selection criteria, the formalization of the agreements, the allocation of resources, the presentation of technical and financial reports, and the monitoring and validation of processes intrinsic to the development of the Program.





1. AREAS OF KNOWLEDGE

AREA I.- Physics, Mathematics and Earth Sciences

AREA II.- Biology and Chemistry

AREA III.- Medicine and Health Sciences

AREA IV.- Humanities and Behavioral Sciences

AREA V.- Social Sciences

AREA VI. – Biotechnology and Agricultural Sciences

AREA VII.- Engineering Science

2. TYPES OF PROPOSALS AND CATEGORIES OF SUPPORT

Research proposals that lead to conceptual advances in scientific knowledge may be submitted to the Fondo Institucional of CONACYT (FOINS). Research proposals must contribute to the generation of novel knowledge, or change in the understanding of existing scientific concepts or models, in any field of science, under parameters of international competence. Research proposals must propose research projects that address challenges, questions or problems in an unconventional way, that is, innovative, original, and potentially resulting in breakthroughs or discoveries at the frontiers of knowledge. The proposals to be presented will belong to one of these three types:

A) INDIVIDUAL. For researchers who work individually. Research proposals should clearly show their contribution to advances to the frontier of knowledge in any area. Proposals must be submitted by a researcher, either young or consolidated. This category will have a maximum of two researchers as participants. Priority will be given to proposals that include 1 or 2 students, preferably graduate. The Principal Researcher must belong to the SNI (Mexican National System of Researchers) or have the degree of Doctor of Philosophy, in which case they must provide supporting documentation.

B) GROUP. Aimed at promoting collaborations among researchers that encourage the exchange of knowledge, skills, experience and methodological approaches between research teams, as well as a shared use of scientific infrastructure. The proposal must present a well-supported and convincing justification of the experience and capabilities of the group, in contributing to the frontier of knowledge and the training of new researchers. Thus, the inclusion of young





researchers, postdoctoral and graduate research students, especially PhD students, in the proposal will be a priority. The proposal must have been agreed by the different participants. The working group must be integrated by at least three researchers who are affiliated to, at least, two different Institutions or, if they belong to the same Institution, they must be affiliated to different academic units. In this category, a consolidated researcher or a young researcher may act as a Principal Researcher. The Principal Researcher and Co-Researcher must belong to the SNI (Mexican National System of Researchers) or have the degree of Doctor in Philosophy, in which case they must attach supporting documentation of their degree.

C) SYNERGY. For scientific research groups that have traditionally been strong in our country, and that have generated frontier knowledge of universal significance and of recognized international quality. The proposal must have been agreed by the different actors, and must indicate the priority lines of research on which the proposal focuses, and its relevance. The proposal and its relevance must be located under the national and international scientific context. The proposal must present a well-supported and convincing justification on the experience and capabilities that the work group will provide to the frontier of knowledge.

The work group must be formed by at least 10 researchers assigned to at least four different national institutions. A consolidated researcher must act as a Principal Researcher in this category. The Principal Researcher and Co-Researcher(s) must belong to the SNI (Mexican National System of Researchers) or have the degree of Doctor of Philosophy, in which case they must attach supporting documentation of their degree, and that their CVU must include leadership in the area involved.

The inclusion of young researchers, and postgraduate and postdoctoral students in the proposal, will be a priority.

Category	Minimum of National Institutions	Number of researchers
Individual (A)	1	2 (maximum)
Group (B)	2 (or two academic units of the same Institution)	3 (minimum)
Synergy (C)	4	10 (minimum)

3. FUNDING AND DURATION OF PROPOSALS

A) INDIVIDUAL. In these proposals, the maximum amount will be up to \$500,000 (five hundred thousand Mexican pesos 00/100 M.N.), with a duration of two years. A





work plan and budget must be provided for each year. This category will have a single stage of two years.

B) GROUP. For these proposals the maximum amount will be of up to \$ 4,500,000.00 (four million five hundred thousand Mexican pesos 00/100 M.N.), with a duration of 3 years. A work plan must be provided for the entire duration of the research, which will be divided into three yearly stages (periods).

C) SYNERGY. The proposals of this category will obtain a maximum amount of up to \$30,000,000.00 (thirty million Mexican pesos 00/100 M.N.), with a duration of 3 years. They must include a work plan for the entire duration of the research, divided into three yearly-stages (periods).

Category	Amount (Mexican pesos)	Mandatory duration	Stages	Installments	Work plan
Individual (A)	\$500,000.00	2 years	1	1	One for each year (mandatory)
Group (B)	\$4,500,000.00	3 years	3	3	
Synergy (C)	\$30,000,000.00	3 years	3	3	

5.2 Structure of the proposals

Research proposals may be submitted on-line to the Fondo Institucional (FOINS) of CONACYT with the aim of encouraging the scientific community of Mexico to contribute to advance the frontier of knowledge.

The proposal must:

- Explicitly contribute to advance the frontier of knowledge.
- Make explicit its originality and scientific relevance, as well as the reasons why it should be considered as a frontier research proposal.
- Show a methodological strategy that demonstrates the rigor of the research, as well as the flexibility to move forward in case of not obtaining the expected results.
- Indicate the expected novel results for the particular proposal, and for possible continuation proposals.
- Indicate the impact of the proposal on the training of new researchers, mainly by the involvement of PhD students and postdoctoral researchers.
- In the case of categories Group (B) and Synergies (C), please provide details regarding the mechanisms that will be used to integrate the various results generated by the proposed lines of research.





The complete proposal must be submitted in the on-line system following the fields provided by the system:

- Executive summary (this will be the public version of the project)
- Background and description of the proposal
- Hypotheses and/or predictions
- General objective and specific objectives
- Goals
- Methodology
- Results
- Expected deliverables for the requested period: research articles, prototypes, technological developments, new researchers/graduate students, books or book chapters, databases, patents, outreach articles, etc.
- Actions of social appropriation of the generated knowledge (videos, infographics, materials or courses for teachers, etc.)
- Bibliography

Additionally, they must:

- Indicate the plan of activities, or work plan, which must include objectives, activities, goals and products, and must outline tasks and outcomes for each participant researcher. The work plan must be structured in accordance with the duration of each category, and grouped into stages of one year each. In the case of the Group and Synergies categories, the work plan and its components must be clearly detailed for each participating Institution.
- Justify the requested budget, both on the investment expenditure and current expenditure for the duration of the proposal and by yearly stage, listing the overheads to be spent for the use of internal services and/or supplies provided by the participating Institutions.
- In the case of the Group and Synergies categories, the corresponding budget for each co-Researcher must be clearly stated.

The research proposal must contain appropriate and enough information so that the evaluators can use to judge its relevance, and it must follow the specifications contained in the Call and these Terms of Reference. As a supporting material for the evaluation process, a proposal must be submitted in the system as a .pdf file, It must not contain any additional information other than what was submitted in the system. It is, however, possible to attach images, figures, formulas, etc.

The proposals for the three funding categories must be submitted in English.

If the Principal Researcher considers that the greatest critical scientific mass of knowledge in the area of their proposal lies within Spanish-speaking countries, the proposal may be submitted in Spanish.





The proponent has the responsibility to verify that the application is complete and that has been submitted within the terms described in the Call.

17. GLOSSARY OF KEY TERMS

Confidential Information. Permanently restricted information that is shared with that quality by individuals, or personal data concerning to an identified or identifiable individual, such as age, email address, telephone number, address, RFC (Mexican Federal taxpayer registration ID), etc. This, in accordance with the Federal Law on Transparency and Access to Public Information.

Consolidated Researcher. A researcher who holds a degree of Doctor of Philosophy and is affiliated to one of the Institutions to which this Call is addressed.

Co-Researcher. Researcher designated by the Principal Researcher in charge of the project as being responsible, before the work group, for the development of the activities, goals, and results of the project, committed by Institutions or Academic Units other than the one acting as Principal Subject of Support, as presented in the work plan of the proposal. They will be responsible, in collaboration with the Principal Researcher, for the presentation of the corresponding technical and financial reports.

Evaluation Committee. Working group integrated by experts of each area of science. They are responsible for leading the process of quality evaluation and technical feasibility of the proposals submitted to FOINS.

Frontier Research. Scientific research that generates original knowledge, which contributes to the understanding of existing scientific concepts in any field of science (including disciplines in the humanities, social sciences, and chemical-biological or physical-mathematical sciences, amongst others). It also addresses issues on which there is some controversy in the scientific community of the field in which it develops, and/or addresses difficult-to-answer questions, at least with current methodological approaches. Therefore, it uses atypical or novel methodologies and concepts in its scope.

Interdisciplinary Research. Research where scientists from two or more disciplines work together to generate knowledge regarding a particular theme.

Participant. A researcher who will conduct one/several activities, and produce one/several outcomes, within the work team.

Pertinence. It refers to something that comes with purpose, that is relevant, appropriate or consistent with what is expected.

Principal Researcher. Individual designated by the Subject of Support, and who is responsible before the FOINS for the application of the funding, for the development of the activities of a project, and for the submission of the corresponding technical and financial reports.

Project. The proposal, after it has been approved by the Technical and Administration Committee, to receive resources from FOINS.





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Consejo Nacional de Ciencia y Tecnología



2020
LEONORA VICARIO
RECONOCIDA MAJESTAD DE LA PATRIA

Proposal period. Time frame that the funding of CONACYT will cover in each Call for the approved projects.

Proposal. Document that broadly describes the research proposal that the Subject of Support intends to develop.

Reserved Information. Information whose access is temporarily restricted, because it falls within any causal indicated by the Federal Law on Transparency and Access to Public Information.

Resource Allocation Agreement (CAR): A legal instrument that sets the Terms and Conditions under which FOINS grants the resources to the Support Subjects in any of the categories defined by the Call.

Rules of Operation of the FOINS. Rules of Operation of the Trust designated as the "Institutional Fund of CONACYT", and that have mandatory compliance, and that stipulate the objectives of the projects, the processes and decision-making authorities for their development, monitoring and evaluation, as well as other provisions leading to the best execution of the purposes of the FOINS.

Stage of the Proposal. Yearly research activities associated to a Budget.

Subject of Support. Higher education institutions, public research centers and, in general, federal and state public sector institutions that conduct scientific research activities, and that are registered with the Registro Nacional de Instituciones y Empresas Científicas y Tecnológicas (RENIECYT), and that submit applications for support to the FOINS.

Technical and Administrative Committee of the Institutional Fund of CONACYT (CTA). Maximum authority of the Fund, responsible for the fulfillment of its purposes and for the authorization of resources to the projects.

Transformative knowledge. When, in science, a radical change appears related with a specific controversial theme or within the general problematic of science, or within both.

Young Researcher. A researcher who is under 40 for men, or under 43 for women, with a degree of Doctor of Philosophy, and who is affiliated to one of the Institutions to which this Call is addressed.

