





Bilateral Call between Austria and the Chinese Academy of Sciences

Research & Development Projects in the field of Nano and Advanced Materials, Detectors, Sensors and Surfaces

Call Guideline 10th call

Cooperative R&D Projects between Austria, FFG and China, CAS

Deadline for submission to FFG via eCall and to CAS:

FFG: July 10th 2024, 12:00 (noon) Central European Summer Time (C.E.S.T.)

CAS: July 10th 2024, 18:00 China Standard Time (C.S.T.)

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0. Key Facts at a Glance

The present Call Guidelines provide information about the international call in the Austrian topic "Digital and Key Enabling Technologies" organised by **Austria and the Chinese Academy of Sciences, CAS, China**. The call promotes the bilateral collaboration in application oriented research and development projects. A total of **EUR 1.000.000** in funding is available for Austrian partners. The call is carried out jointly by the Austrian Research Promotion Agency (FFG) and the Chinese Academy of Sciences (CAS).

Table 1: Overview

Programme	FFG, Digital and Key Enabling Technologies	CAS, Chinese Academy of Sciences
Instrument	Cooperative R&D project	Cooperative R&D project
Research category	Industrial research or experimental development	Basic research, industrial research, experimental development
Topic	- Nano and advanced materials, detectors, sensors and surfaces (This topic also includes Nano and high performance materials for wearables, energy, sustainability, CO2 reduction and health applications. Detectors, Biosensors, surface functionalization and functional coatings are addressed as well.)	- Nano and advanced materials, detectors, sensors and surfaces (This topic also includes Nano and high performance materials for wearables, energy, sustainability, CO2 reduction and health applications. Detectors, Biosensors, surface functionalization and functional coatings are addressed as well.)
Funding amount	min. EUR 100.000 to max. EUR 350.000	CNY 300.000 p.a. (approx. EUR 38.000 per year).total: max. CNY 900.000 for 3 years
Funding rate	max. 85%	approx. 50% (see Call Fiche)
Duration	max. 36 months	max. 36 months
Cooperation required	Yes, is required, see present guidelines	Yes
Total budget	EUR 1.000.000	open
Funding provider	Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology (BMK)	Chinese Academy of Sciences (CAS)

Programme	FFG, Digital and Key Enabling Technologies	CAS, Chinese Academy of Sciences
Submission deadlines transnational	Joint Proposal via FFG eCall: 10 th July 2024, 12:00 C.E.S.T. (noon)	Joint Proposal via CAS: 10 th July 2024, 18:00 C.S.T
Submission deadlines national	Austrian Annex and Cost Plan via FFG eCall: 10 th July 2024, 12:00 C.E.S.T. (noon)	CAS additional documents: 10 th July 2024, 18:00 C.S.T
Language	FFG eCall Joint Proposal: English FFG eCall Austrian Annex: English or German	CAS Joint Proposal: English CAS national proposal: Chinese
Contact	DI Manuel Binder T: +43 (0)57755-5041 E: manuel.binder@ffg.at	Ning Liu T: +86-10-68597582 E: <u>nliu@cashq.ac.cn</u>
Information on the Web	www.ffg.at/key-enabling-technologies- china2024/	http://www.bic.cas.cn/tzgg/

The present Call Guidelines apply to the Austrian partners. They summarise information about the bilateral call on the research topic "Nano and advanced materials, detectors, sensors and surfaces" and refer to the related call documents (in particular Technical Guidelines, application forms, Cost Guideline).

The call documents are available on the website.

The full set of application documents must be submitted via FFG <u>eCall</u> until submission deadline.

Please note:

If the application does not meet the formal requirements for project submission in accordance with the conditions and criteria of the respective funding instrument and if the deficiencies cannot be corrected the application will be excluded from the further procedure and will be formally rejected without exception in accordance with the principle of equal treatment of applications.

1 Motivation

The topic "Digital and key enabling technologies" is aimed at developing a comprehensive strategy for research, technology and innovation in the production sector in close dialogue with representatives from the manufacturing industry, research institutions, stakeholder groups and disseminators. It has built a track record of national, transnational and human resource measures in the past eleven years.

The economic performance of Austria strongly depends on its manufacturing industry. The ability to manufacture internationally competitive products and to increase productivity is key to the economic growth of Austria as a highly industrialised and knowledge based country. Innovation in the manufacturing sector will continue to be an indispensable basis for added value and employment in the future.

The Call 2024 will focus on the bilateral collaboration between Austria and China with the Chinese Academy of Sciences, CAS, in application-oriented research. The strategic aim of 'strengthening European and international collaborations and networks' will be addressed in particular. The call topic is designed to leverage common fields of expertise of Austria and the Chinese Academy of Sciences in China.

1.1 Strategic objectives

The strategic objectives of the topic "Digital and key enabling technologies" are:

- The use of key technologies and innovative production processes should make significant contributions to the energy transition, the mobility transition and the climate-neutral city (nanotechnology, lightweight construction, materials research, additive manufacturing, photonics, artificial intelligence).
- Research and innovation in sectors with high potential for increasing the climate and environmental compatibility of processes must be promoted and interdisciplinary cooperation (national and international) must be facilitated.
- Mastering key technologies with high potential for impact on the Austrian economy / material goods production (e.g. nanotechnologies, materials, smart textiles, additive manufacturing, photonics, robotics, Industry 4.0) promotes sustainable development and prosperity
- Utilise the potential of key technologies in Austria and deploy them in a targeted manner
- Ensure improved access to European and international markets for Austrian RTI players

1.2 Operative objectives

The following **operative objectives** are essential for the **specific call topic** described in Chapter 2 – at least one of these must be addressed in the national application.

- Objective 1: Key technologies with a high potential impact on Austrian industries /
 companies / the economy should be developed and their integration into European and
 international value chains should be able to realise their full potential (for sustainable
 development and economic growth).
- Objective 2: The visibility of Austrian technologies in the European and international environment will be strengthened and participation in European and international networks will be facilitated.

1.3 Sustainability

Future-oriented research and development seeks to achieve the current global, European, national and regional goals that are designed to put us on a path to a sustainable future. The integration of sustainability aspects in research and development projects generates new

knowledge, which is essential for supporting ecological, social and economic transformation processes. Responsible research funding therefore supports social adaptation, learning and decision-making processes that are of relevance for industry and science and promote their sustainable development.

This call requires applicants to address the key sustainability goals to which the proposed project makes a concrete positive contribution. The planned sustainability effects must be described in the application and taken into account in the research design.

What are the underlying sustainability initiatives and measures?

The call refers to the global Sustainable Development Goals of the United Nations (SDGs) and the European elements of the EU Green Deal. This is supplemented by additional national goals specified in the Government Programme 2020, including climate neutrality, efficient use of resources and implementation of a clean circular economy.

More detailed information can be found in the Annex.

Please note: Applicants should cite only those sustainability goals and aspects to which the project makes a substantial contribution and which are relevant for the content, implementation and exploitation of the project. Citing a large number of sustainability goals will not necessarily lead to a better assessment of the project.

2 Call Topic

The project must have its key focus on the call topic listed below:

Nano and advanced materials, detectors, sensors and surfaces

This topic also includes Nano and high performance materials for wearables, energy, sustainability, CO₂ reduction and health applications. Detectors, biosensors, surface functionalization and functional coatings are addressed as well.

3 Requirements

3.1 General requirements for the Chinese-Austrian consortium

The requirements and procedures described in the 'Call Fiche' apply to the consortium. The following criteria must be met:

- The consortium shall consist of at least one partner from CAS Chinese Academy of Sciences and at least one Austrian partner.
- The consortium shall include at least one Austrian industrial partner.
- **Individual enterprises** account for a maximum of 70% of the eligible project costs with shares of affiliated companies counting as one enterprise.
- Companies share is a minimum of 20% and a maximum of 90%.
- The research institution(s) bear(s) at least 10% and a maximum of 80% of the eligible costs (relates to the total share of Austrian research institutions and CAS research groups). This applies to the entire bilateral consortium in deviation from the Austrian Technical Guidelines for Cooperative R&D Projects at a Transnational Level. Therefore, as a matter of fact, Chapter 2.2 in the Technical Guidelines for Cooperative R&D Projects is not valid for this call.
- The research institution(s) shall be entitled to publish the **results of the research** carried out by the respective institution(s).
- The applicant must ensure that the bilateral projects submitted are not aimed at developing weapons or violence-promoting products. This provision must be specifically included in the Consortium Agreement. The payment of funding depends on compliance with this requirement.
- The applicant must ensure that the bilateral projects submitted are not aimed at gambling of any kind (i.e. games in which the outcome is determined exclusively or predominantly by chance). This provision must be specifically included in the Consortium Agreement. The payment of funding depends on compliance with this requirement.
- Any other **commercial and/or export restrictions** currently in place must be observed.
- A Consortium Agreement signed by all partners must be forwarded to FFG via eCall and to CAS Chinese Academy of Sciences prior to the preparation of the national funding agreement.

- The Joint Proposal must be submitted via FFG <u>eCall</u> by 10th July 2024, 12:00 (noon)
 C.E.S.T. Central European Summer Time at the latest.
- The Joint Proposal must be submitted to CAS Chinese Academy of Sciences by 10th July 2024, 18:00 C.S.T. China Standard Time at the latest.
- The Joint Proposal submitted to FFG and CAS Chinese Academy of Sciences must be identical. In the event of deviations, FFG reserves the right to reject the proposal for formal reasons.

3.2 National requirements

Bilateral cooperative research and development projects between Austria and China falling into the research categories 'Industrial Research' or 'Experimental Development' may only be submitted under this call.

The following requirements shall apply to submissions by Austrian participants to FFG in the topic "Digital and key enabling technologies" in addition to the general requirements specified in Chapter 3.1 above:

- the provisions of the Technical Guidelines for Cooperative R&D Projects at Transnational Level
- In addition to the Joint Proposal the Austrian national Annex must be uploaded via eCall. The application documents must be submitted via <u>eCall</u> by 10th July 2024, 12:00 (noon) C.E.S.T. at the latest.

The following provisions apply in deviation from the Technical Guidelines for Cooperative R&D Projects at Transnational Level:

- The amount of funding requested by the Austrian partners must be between EUR 100.000 and EUR 350.000.
- The following requirements shall apply to the entire Austrian-Chinese consortium instead
 of the requirements specified in Chapter 2.2 of the Technical Guidelines:
 - the research institution(s) bear(s) at least 10% and a maximum of 80% of the eligible costs
 - Companies share is a minimum of 20% and a maximum of 90%
 - the research institution(s) shall be entitled to publish the results of the research carried out by the respective institution(s)

- A Consortium Agreement signed by all partners must be forwarded to FFG via eCall prior to the preparation of the national funding agreement.
- The requirements specified in Chapter 2.2 of the Technical Guidelines shall be replaced by the requirement that at least **one Austrian company** must participate in the Austrian-Chinese consortium.
- The Chinese applicant and partners must be from one or more CAS research groups.
- Companies are eligible to apply if they have a permanent establishment or branch (according to Council Directive 2011/96/EU of 30 November 2011, in conjunction with Art. 11 (5) a GBER, No. 651/2014 of 17 June 2014) in Austria at the time of submission of the application and payment of funding.
 - Art. 2 (b): 'Permanent establishment' means a fixed place of business situated in a
 Member State through which the business of a company of another Member State is
 wholly or partly carried on in so far as the profits of that place of business are subject
 to tax in the Member State in which it is situated by virtue of the relevant bilateral tax
 treaty or, in the absence of such a treaty, by virtue of national law;
 - Art. 3 (1) Definition of parent company and subsidiary
- Companies from Austria are eligible to apply if their main focus is on research and the
 exploitation of results in Austria. Subsidiaries based in China may act as sub-contractors
 in the consortium, if required.
- The <u>EUR-CNY conversion rate</u> of the European Central Bank ECB at the date of submission shall apply. This can either be the reference date specified in the Joint Proposal or the conversion rate provided by the ECB on a monthly basis. The rate must be specified in the Joint Proposal. The conversion rate shall apply for the duration of the project and for all reports related thereto.
- The participation and financing of additional international partners in the consortium shall be excluded in this 10th bilateral call in deviation from the provisions of the Technical Guidelines.

Austrian partners and partners of CAS may cover their costs by own funds and/or grants provided by Austria or China. Partners from other countries shall be excluded from participating in the consortium. Organisations from outside Austria or China may be involved as sub-contractors of Austrian partners. FFG will check whether the Austrian project part is properly allocated to the research category of 'Industrial Research' or 'Experimental Development' based on the Joint Proposal. This may involve a reduction in the funding rate. BMK will take the funding decision for the Austrian project partners. CAS shall be responsible for the funding decision for the Chinese partners.

4 Call Documents

4.1 Joint call documents Austria – CAS Chinese Academy of Sciences

Table 2: Joint transnational call documents

Joint transnational call documents	Documents in detail
Call Fiche	Call Fiche Joint call guidelines FFG and CAS
Application form	Joint Proposal Joint project description Austria – CAS
Download	www.ffg.at/key-enabling-technologies-china2024/

4.2 National call documents for Austrian Partners

The following Austrian national call documents shall apply in addition to the joint call documents:

Table 3: Additional documents to be submitted by Austrian participants

Additional documents to be submitted by Austrian participants	Documents in detail
Call Guideline (present document)	Call Guideline Bilateral Call between Austria and the Chinese Academy of Sciences (Version 1.0)
Application forms: for transnational cooperative R&D projects Industrial Research or Experimental Development	Technical Guidelines for Cooperative R&D Projects at Transnational Level Version 4.0 Project Description - Austrian Annex Declaration of SME Status (if required) ¹
General cost regulations	Cost Guidelines 3.1 (eligibility of costs in FFG projects)
Legal basis	FFG-Technologie-Richtlinie 2024-2026 (Richtlinie für die Österreichische Forschungsförderungsgesellschaft mbH zur Förderung digitaler wie industrieller Schlüssel- und Raumfahrttechnologien und -innovationen)
Download	www.ffg.at/key-enabling-technologies-china2024/

National applications must be submitted electronically **via eCall**. The **Joint Proposal** and **the Austrian Annex** must be uploaded via eCall as part of the electronic application.

Applicants are requested to use the specific templates provided for the submission of their projects. The funding conditions, application procedure and funding criteria are described in the corresponding Technical Guidelines and in the transnational call documents.

The call documents are available on the webpage.

The cost plan has to be filled in via the eCall. It must show the project costs broken down to work package level. This also applies to accounts rendered as part of the reporting process.

¹ If there is no information available in the Austrian Business Compass (e.g. for associations and start-ups), a Declaration of SME Status must be provided upon submission of the proposal. In the template provided by the FFG, applicants must (as far as possible) categorise their business for the last three years according to the SME definition.

More detailed information on the call and the relevant call documents can be found at:

- National website <u>Production and Material and Key Enabling Technologies</u>
- eCall submission
- National contact at FFG:

DI Manuel Binder MSc, E: manuel.binder@ffq.at

T: +43 (0)57755-5041 Programme manager

4.3 National call documents for CAS Chinese Academy of Sciences

For the Chinese partners, further national call documents of CAS shall apply in addition to the joint call documents.

The Chinese partners will find more detailed information on the call and the relevant call documents at:

- National website of CAS
- National contact at CAS:

Mr. Ning Liu, Bureau of International Cooperation

E: nliu@cashq.ac.cn | +86-10-68597582

5 Legal Basis

The final funding decision is made by the Management Board of FFG on the basis of the funding recommendations of the evaluation panel.

FFG-Technologie-Richtlinie 2024-2026

(Richtlinie für die Österreichische Forschungsförderungsgesellschaft mbH zur Förderung digitaler wie industrieller Schlüssel- und Raumfahrttechnologien und -innovationen)

For a definition of SME – small and medium sized enterprises – see the applicable SME definition under EU competition law. Further information is available on the <u>SME-webpage of FFG</u>.

All EU regulations are to be applied as amended.

6 Additional Information

This section contains information about additional funding options and services which you may find useful in connection with funding applications or funded projects.

6.1 FFG Project Database

The public access <u>FFG Project Database</u> (provides the opportunity to publish brief information about funded projects and an overview of the project partners involved. This enables you to present your project and your project partners to the interested public. The database can also be used to search for cooperation partners.

Once funding is granted, the applicants are informed via eCall that they can publish brief defined information about their project in the FFG Project Database. The information will only be published if active consent is given in the eCall system.

For more information see the FAQs to the Project Database.

6.2 BMK Open4Innovation

The <u>open4innovation</u> platform of the Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology (BMK) offers an additional knowledge base for companies and researchers (community support, detailed information, success stories, etc.).

6.3 Handling project data – data management plan

A data management plan (DMP) is a tool that supports the efficient and systematic management of all data generated throughout the duration of a project.

DMPs can be created, e.g., using the free tool <u>DMP Online</u>. The "<u>Guidelines on FAIR Data Management</u>" of the European Commission also provide assistance in this respect.

A data management plan describes

- which data are collected, processed or generated within a project
- how these data are handled within the project
- what methods and standards are applied
- how the data are stored and updated over the long term and
- whether it is planned to make datasets available to third parties for reuse (i.e., open access to research data)

In the event of publication, the data should be "findable, accessible, interoperable and reusable". Storing data in established and internationally recognised repositories (see the <u>re3data website</u>) is recommended to ensure broad access.

7 Further Funding Options

FFG offers a broad range of funding options and support for the participation in international programmes. For further information please contact the <u>FFG Funding Service</u>.

8 Annex: Sustainability

Responsible and future-oriented research and development seeks to achieve the current global, European, national and regional goals that are designed to put us on a path to a sustainable future. The transformation processes in industry and science are expected to make a major contribution to climate neutrality, a more efficient use of resources and a clean circular economy. Research funding must therefore be in line with the objectives of the two underlying initiatives, i.e. the Sustainable Development Goals of the United Nations (SDGs) and the eight elements of the EU Green Deal.

General information

The Austrian Federal Government has made the fight against climate change one of its top priorities in its <u>Government Programme 2020</u>, which aims to achieve climate neutrality by 2040.

This national goal is based on the <u>2030 Agenda</u> adopted by the United Nations in 2015. It contains a set of 17 Sustainable Development Goals (UN SDGs) which UN member states, including Austria, have pledged to achieve.

The specific sub-goals of the 17 Sustainable Development Goals (UN SDGs) which are of relevance for Austria and can be practically implemented at the national level can be found on the website of the Federal Chancellery.

In 2019 the European Commission published the <u>EU Green Deal</u>, a strategy comprising eight elements with the aim to make Europe the first climate neutral continent by 2050.

The topic of sustainability was therefore integrated into the assessment criteria of the present funding instrument. Both funding applicants and funding recipients are required to describe and report on how their project contributes to achieving the ecological, social and

economic sustainability goals and how sustainability aspects are taken into account in project planning, implementation and exploitation.

This general information is also available on the FFG website.

Please note that sustainability will be considered with a focus on the ecological, social and economic effects of the project.