Ref. No.: E6271 AB-CSIR/1027/2022-ISTAD-CSIR HQ dated 29-10-2024





CSIR, India – NAS, Belarus

Call for Research, Development and Innovation Projects

2024

CALL SNAPSHOT

Aim	The aim of the call is to intensify cooperation between India and Belarus in science and technology by means of Academia-Industry Cooperation projects.									
Competition opens	October 30, 2024									
Final date for online proposal submission	January 08, 2025									
Eligible applicant	For Indian Team The Indian consortium has to consist of at least one CSIR institute (https://www.csir.res.in/csir-labs) and Participation of industry (the end user of the project outcome) in the Projects is desirable.	For Belarusian Team The Belarusian consortium has to consist of at least one NAS of Belarus organization (https://nasb.gov.by/eng/about/orga nizatsii/) and Participation of Belarusian industry (the end user of the project outcome) in the Projects is desirable.								
Award parameters	CSIR partners can receive up to 3,800,000 Indian Rupees per project for 24 months (the amount can be adjusted depending on the project and the period of its completion in each individual case). Industry participants would need to bring their own resources (in- kind/in-cash) for participation in the call.	NAS of Belarus institution can receive up to 150,000 Belarusian Rubles/per project for up to 24 months (the amount can be adjusted depending on the project and the period of its completion in each individual case). Industry participants would need to bring their own resources (in- kind/in-cash) for participation in the call.								
How to apply	For Indian Team Proposal submission is made through the CSIR Website (www.csir.res.in) on CSIR's International Cooperation Management System(ICMS).	For Belarusian Team Proposal submission is made through the Belarusian Republican Foundation of Fundamental Research (<u>https://www.ipps.by:9030</u>).								

1. Legal framework and Objective

The Council of Scientific and Industrial Research, India (CSIR) and the National Academy of Sciences of Belarus (NAS of Belarus), in compliance with the MoU on S&T Cooperation, signed between the Parties on May 22, 2023 that provided a framework for promotion of cooperation in scientific technological development, hereinafter referred to as the "MoU", the Parties agreed upon the Program of Cooperation to the MoU, hereinafter referred to as the "POC" signed on April 16, 2024, to specify the terms of implementation of the MoU through cooperation activities to be performed in the period 2024-2026. Now CSIR and NAS of Belarus agreed to announce a joint Call for Proposals. The main objective of this call, launched under this protocol, is to support R&D and innovation projects to promote the scientific and technological cooperation between two countries.

2. Scope of the Call

Within the framework of this call, the joint Projects should be focused on application oriented experimental/design/upscaling and showcasing R&D activities of CSIR and NAS of Belarus. The Joint projects should be in the mutually agreed in the priority areas as specified in section 4 of this announcement. The Projects should target 1) improvement of Technology Readiness Level and/or 2) efforts for deploying solutions with support of stakeholders including Industries.

The CSIR- NAS of Belarus program is aimed at:

- Enhancement of scientific cooperation between both countries.
- Implementation of joint Projects of mutual interest by both Parties.
- Stimulation of involvement of researchers from India and Belarus and enabling them to translate research and innovation into economically and socially relevant deliverables.
- Supporting the research teams aspiring to cooperate on large international projects in the future.
- Enabling the use of methodology, infrastructure and equipment for the mutual benefit of both Parties.

3. R&D stages / focus

The joint projects should focus on:

- a **Innovation**: a new or improved product or process (or combination thereof) that differs significantly from the unit's previous products or processes and that has been made available to potential users (product) or brought into use by the unit (process);
- b **Technological Development and deployment**: new or improved products or technological process innovations which would cater to the industrial needs;
- c **World trends in the development of science**: research projects that can contribute to the expansion and deepening of scientific knowledge characterized by novelty in the formulation and methods of research, which are of great scientific and practical importance.

Investment-oriented projects for production or production infrastructure (including the purchase of facilities and looms) and projects without R&D content are not supported because of being not suitable for the purposes of the program.

4. Thematic Fields

The Joint Projects should be in the mutually agreed priority areas as specified in the MoU and given below for reference

- (a) energy and energy saving technologies;
- (b) technologies related to agriculture;
- (c) industrial and construction technologies and production;
- (d) medicine and medical technologies; pharmacy;
- (e) chemical technologies; nano- and bio-technologies;
- (f) information-communication technologies;
- (g) new materials;
- (h) water management technologies;
- (i) natural resource management;
- (j) environmental protection.

Proposals submitted in other fields will not be accepted.

5. Eligibility criteria

- Maximum project duration is 2 years, i.e. 24 months.
- Maximum **7 joint projects** will be funded in the scope of this call.
- Joint Projects can be proposed and submitted by CSIR institutes/units on the CSIR side, while on the Belarusian side scientific organizations of the NAS of Belarus can participate. Participation

of industry (the end user of the project outcome) in the Projects is desirable on both sides. Industry participants would need to bring their own resources (finances in-kind/in-cash) for participation in the call.

• The proposal must be within one or more of the specific research priority areas described in **Section 4.**

5.1 On Belarusian side:

• Belarusian team will receive funding through the Belarusian Republican Foundation for Fundamental Research.

5.2 On Indian Side:

- Indian team will receive funding through CSIR International S&T Affairs Directorate's Program as per CSIR rules and regulations.
- Other Institutions (non CSIR Academic and Research institutions) can participate in the projects as stakeholder/knowledge partner only. Such participation however cannot be funded by CSIR.
- The resources brought in by the Industry/ other institutions participants need to be documented/ indicated in the project application.
- The Indian company applying for the project in collaboration with the CSIR institute must be registered under the Companies Act 2013 of GoI. The company must be at least 51% owned by Indian citizens over the total duration of the project. MSMEs/Start-ups are also encouraged to participate in the call.

6. Financial conditions

- Financial contributions will be provided in compliance with the valid national legislation and internal regulations of the partner organisations.
- Each Party shall meet all R&D costs of its research teams of the mutually approved Projects.
- The cost of exchange of experts, scientists and other specialists will be covered on the following basis:
 - The sending Party shall meet all costs connected with the roundtrip international travel up to the host institute, overseas travel insurance and emergency health insurance for its research team members visiting the partner institute.
 - The receiving Party shall meet all costs connected with lodging, applicable inter-city travel and allowances according to their own regulations:

6.1 CSIR funding regulations:

- Indian partner can receive up to 38 Lakhs per project for up to 24 months (the amount can be adjusted depending on the project and the period of its completion in each individual case).
- Funding shall be provided as per CSIR rules and regulations as given below. The following would be met as per CSIR guidelines (a-c) by CSIR HQ & (d) by CSIR Institute

a. **Mobility costs**: travel costs for the visiting Indian experts up to the host institute/nearest airport including visa fee and insurance, and the living expenses for the visiting Belarus researchers;

b. **Research costs** such as equipment, consumables (other than those available from Institutional resources) and contingency;

c. Temporary manpower cost for up to 2 project personnel; and

d. **Subcontract Services**, in case required in the project, will be met by the concerned CSIR Institute.

e. **Funding to Industry/other Academic Institutions**: Industry participants / Other Institutions involved would need to bring in their own resources (Finances in-kind/in-cash) for participation in the call. The resources need to be documented/ indicated in the project application. Other

Institutions (Industry/Academia/University/R&D Institute) would participate in the projects as a stakeholder/knowledge partner. Such participation however cannot be funded by CSIR.

- Number of visits and visit duration: A total of up to three (3) visits per project with up to one (1) visit (Scientist / researcher) per year per project for a total duration not exceeding 30 days per year shall be supported.
- Visit of Belarus Researchers to India: Fully furnished Guest house accommodation or Accommodation @ INR 4500 per day; Daily Allowance in India @ INR 2500 per day to cover living expenses, such as towards food and intra-city travel.

6.2 Belarusian funding regulations:

- Belarusian funded costs of each project will be issued and managed by the applicable national legislation and internal regulations of the NAS of Belarus.
- Belarusian partner can receive up to 150 000 Belarusian Rubles/per project for up to 24 months (the amount can be adjusted depending on the project and the period of its completion in each individual case);
- NAS of Belarus funds eligible costs, such as:

a. **Mobility costs**: roundtrip international travel up to the host institute, insurance for the visiting Belarusian experts and living expenses for the visiting Indian experts;

b. Research costs: consumables, services, equipment, and networking;

- c. **Personnel expenses** for the Belarusian team.
- Number of visit and visit duration: The total duration of international visits in one direction should not exceed 30 days per year for each supported joint project with a total of 3 visits.
- Visit of Indian Researchers to Belarus: accommodation in Akademicheskaya hotel of the NAS of Belarus or 140 Belarusian rubles for accommodation; for food and internal transportation 75 Belarusian rubles.

7. Project proposal submission

- Project proposals must be submitted to both partner organisations in parallel.
- The partners should come to an agreement with each other using their own means of communication and jointly develop and complete their project proposals before submitting it to CSIR and NAS of Belarus.
- Each proposal shall comprise an Application Form and additional formal and financial information according to the required form, which should be submitted to the both funding organisations properly.

7.1 On Belarusian side

- Belarusian partners will make their joint online application via NAS of Belarus online application system: <u>https://www.ipps.by:9030</u>.
- Submission of proposals by fax or e-mail will not be accepted.

7.2 On Indian side:

- Indian partners will make the joint online application via CSIR Website on the CSIR's International Cooperation Management System (ICMS)
- Link for submission of applications through ICMS will be live in 15 days from the call announcement on CSIR website at <u>www.csir.res.in</u>; ICMS: <u>https://www.csir.res.in/icms/login</u>.
- Submission of proposals by email / hard copies or fax will not be accepted.

8. Evaluation and Selection

- The Project proposals shall be evaluated by CSIR and NAS of Belarus keeping in considerations the national laws and regulations of both India and Belarus.
- Based on the evaluation a ranking list of proposals with an average score (Indian and Belarusian) given for each proposal.
- Approval or rejection shall be subject to the joint decision of the Parties.
- Indian and Belarusian-based teams must each be led by a Lead Principal Investigator (LPI). Each proposal should have a Project Coordinator who will be selected from the LPIs of the proposal and this person is responsible for coordinating the whole consortium.
- Total number of projects approved for funding is dependent on the financial possibilities of both Parties.

8.1 Criteria for evaluation of project proposals

- Project proposals that fit to the call topics only shall be considered.
- The proposals will be reviewed according to a certain set of evaluation criteria.
 - Scientific/Technological Excellence
 - Methodology
 - Project Management
 - Importance of International Collaboration
 - o Impact

8.2 Implementation

- The joint Projects shall be realized according to the internal procedures of both Parties.
- Changes in the research teams, etc. are subject to the internal rules of each Party. In case of any changes, the other Party shall be notified without delay.
- The Projects shall be monitored through progress reports and respective institutional guidelines. The final report shall be submitted to both Parties in accordance with their internal regulations.

9. Research Ethics and Regulatory Requirements

As the research projects will be carried out by multiple project partners, the basis of collaboration between the project partners, including ownership of intellectual property (IP) generated during the project and rights to exploitation, and IP management is expected to be set out in an Intellectual Property Management Agreement between the project partners involved. It is the responsibility of the project partners to put such an agreement in place that should be provided when requested by funding agencies. The terms of collaboration would be in accordance to the CSIR- NAS of Belarus MoU and must not conflict with the funding agencies terms and conditions and their respective national laws.

10. Schedule

The following table shows important dates for the call.

Fimeline for NAS of Belarus – CSIR, India Call for Proposals								
Description	Dates							
Opening of submission	October 30, 2024							
Deadline for the submission of the project proposal	January 08, 2025							
Exchange of applications	January 20, 2025							
Evaluation and Selection of the Proposals on both sides (including exchange of information)	March 14, 2025							
Approval of Projects for financing	April 15, 2025							
Announcements of Results	April 16, 2025							
Start of Projects	May 15, 2025							

11. Contact

From the Belarusian side the "Call" will be announced/ coordinated by the Belarusian Republican Foundation of Fundamental Research, while on Indian side the International S&T Affairs Directorate would announce/coordinate the Call

On Indian side:	On Belarusian side:						
Dr. Anand MOHIT	Ms. Olga Kozhevnikova						
International S&T Affairs Directorate (ISTAD)	Main Department of International R&D						
CSIR	Cooperation						
Tel: +91-11-23470221	NAS of Belarus						
E-mail: <u>anandm@csir.res.in</u>	Tel.:+375 17 373-24-53						
Ms. Kamlesh Rani , ISTAD, CSIR; Tel: 011-23470224; 011-23316764; E-mail: <u>kamlesh@csir.res.in</u>	e-mail: <u>olgak@presidium.bas-net.by</u> BRFFR Tel.: +375 17 379-72-16 (physics, mathematics,						
For any IT related queries (with respect to form filling/login to ICMS portal on CSIR website etc.) please contact Ms. C. Sagar , Sr. Technical Officer (3), IT CSIR; Tel: 011-23470104; Email: <u>csagar@csir.res.in</u> ; <u>itweb@csir.res.in</u> ;	and IT), +375 17 379-27-22 (engineering), +375 17 378-92-17 (agriculture and biology, international cooperation department), +375 17 379-93-36 (chemistry and Earth sciences, medicine and pharmacy), +375 17 379-93-35 (accountant's office).						





CSIR, India & NAS, Belarus

Joint Call for Research, Development and Innovation Projects, 2024-

2026

Application Form

- 1. The application form (including Section 7) **must not exceed 30 pages** and must be typed using the minimum font size of 10 with single spaced lines. Do not change the established formats of the tables. Explanations written in italics can be deleted.
- 2. Application form **must be prepared in English**.
- 3. Please complete all the sections **for all partners** involving in the project from different countries, including the partner(s) not requesting funding.
- 4. Keep in mind that a separate document needs to be filled for the details of requested project budget.

Acronym of the Project

Title of the Project

Positioning of the Project

Describe the positioning of the project e.g. where it is situated in the spectrum from 'idea to application', or from 'lab to market'. Please indicate Technology Readiness Levels (TRLs) where relevant.

Accordance with the call:

Please describe how the project fits the scope of call (max. 1/2 page)

Related specific thematic area(s) of the call (if relevant):

Project Duration:

months

Partners involved in the project

Partner Number	Country	Full Name of Partner Organization	Organisation Type	Name of Principal Investigator (PI)	Project Cost requester by the applicant	Currency INR / Rubles
1						
2						
3						





4			
		Total (India)	
		Total (Belarus)	

Use as many lines as needed

Summary of the project (publishable abstract, max. 1 page):

Please describe the following aspects in separate paragraphs.									
i) Scientific/Technological Excellence									
ii) Methodology									
iii) Project Management									
iv) Importance of International Collaboration									
v) Impact									
Keywords:									

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Make sure that the page numbers are updated before the submission.

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Section 1: Scientific/Technological Excellence

1.1 Aims and Objectives of the Project

(~ 1-2 page)

Please describe the aims and scientific/technical objectives of the project in detail with clear and brief statements. The objectives should be measurable, realistic and achievable within the duration of the project.

1.2 State of the Art

(~ 1-2 pages)

Please describe the current national and international state of the art in the domain addressed by the project (present a literature review including, if applicable, patent/utility model/market research relevant to the project). All necessary references should be given in Section 7.

1.3 Scientific Quality, Innovation Potential and Contribution

(~ 1-2 page)

Please describe the scientific quality and innovation potential of the project as well as its methodological/conceptual/theoretical contribution to the related scientific and technological area, highlighting the expected progress beyond the state of the art.

Section 2: Methodology

(~ 1-2 page)

Please explain the scientific and technological methodology and research techniques (including data collection techniques, tools and data analysis methods) to achieve the objectives of the project. Be specific and avoid general descriptions. Describe experience or preliminary results showing feasibility.





Section 3: Project Management

3.1 Work plan

(~ 2-3 page)

Provide a work-time schedule using the following Gantt chart. A graphical presentation (Pert chart or similar) which shows inter-relations of different work packages (WPs) is also expected. Literature review, preparation of progress and final reports, dissemination activities, writing articles and purchasing of any material to be used during the project should not be a separate WP.

Describe the organizational structure, the management structure and the decision-making.

WP	WP		Year 1						Year 2					Year 3																							
No	Name	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36

Work-Time Schedule (Gantt chart)

Use as many rows and columns as needed





3.2 Work Packages

Provide a description of each work package (templates provided).

(Up to 1 page per WP)

				_		Start	End	Duration			
WP	1		WP Tit	le		Date	Date	(months)			
Contr	ibution	of project	partners	1			-				
Partne	er numb	er1	1	2		3	4				
Total	effort pe	er									
partne	er										
(Perso	on-mont	hs) ²									
Objec	tives										
Please where	Please provide a general description of the work to be undertaken (including methods to be applied where appropriate), identify the partners involved and specify their contributions.										
Interd	lepende	nce with O	Other Work Packag	jes							
Please	e descrik	e the inter	rdependencies betv	veen the present wor	k packa	ige with oth	er work	packages.			
Tasks											
T1.1	Task ti	tle (Start r	month – end mont	h; Responsible partn	er; Invo	olved partne	er(s))				
	Descri	ption of wo	ork and role of part	icipant							
T1.2	Task ti	tle (Start r	month – end mont	h; Responsible partn	er; Invo	olved partne	er(s))				
	Descri	ption of wo	ork and role of part	icipant							
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D1 1		uenvery									
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01.2			Add ac many	lines as needed							
			Auu us many	inies us neeueu							

Use as many WP templates as needed

Work package overview: Total effort per WP and partner (Person-months)

Partner	WP1	WP2	WP3	WP4	WP5	WP6	Total
Number							
1							
2							
3							
4							
Total							

Use as many lines and columns as needed

¹ Partner numbers should be consistent with those assigned on the first page of the form. Bold the partner number of the work package leader.

 $^{^{2}}$ "Person-month" is the metric for expressing the effort that a person devotes to the project. To calculate person-month, multiply the percentage of working time by number of months. For example, if a person allocates %50 of his/her working time for the project activities for 10 months, then his/her contribution in terms of person-month will be 0,5 x 10 = 5 person-month. The total effort per partner in each WP is the sum of person-months of all project personnel involving in that WP.





3.3 Milestones, Success Criteria and Risk Analysis

(~ 1-2 pages)

Please provide a list of milestones, success criteria and potential risks (templates provided).

List of milestones

Milestone	Delivery month	WP involved	Title
M1			
M2			
M3			

Use as many lines as needed, but try to limit the number of milestones

Success Criteria

The success criterion describes the criterion for each WP to be considered successful. The success criteria should be measurable and monitorable.

WP	Objective	Success Criteria	Importance of the WP for the
	of WP	(%, number, statement etc.)	Success of the Project (%)
WP1			
WP2			
WP3			

Use as many lines and columns as needed

The sum of percentages in the "Importance of the WP for Success of the Project" column should be 100.

Risk analysis

The risks that can affect the success of the project negatively, their potential impacts and corresponding mitigation plans should be described. Risk Reduction Plan should be in line with the main objectives of project.

Risk description	Probability ³	Impact	Risk Reduction Plan		

³ Rate as low, medium or high.





Section 4: Importance of International Collaboration

4.1 Expertise and role of each partner

Describe each partner in the project by using the template below.

(max. 1 page per partner)

Partner n (1,2,3 etc.)	Organization Full name	
Expertise		
Expertise of the partner's project team related to the objectives of the project.		

Provide a brief CV of the principal investigator highlighting research experience and list the 5 most important publications of the last three years.

Role in project

Use as many templates as needed

4.2 Added value of the collaboration

- (~ 1 page)
 - How the partners complement one another in terms of necessary expertise, technology and other resources? Describe the added value of the consortium as a whole (including complementarity, balance).
 - Please explain the necessity and importance of implementing the project with international collaboration.
 - If the technology transfer between the partners is foreseen, please explain how it will be accomplished.

4.3 Description of significant facilities and infrastructure available to the partners

(~ 1 page)

- Please list the facilities/infrastructure (laboratories, testing environment, equipment, software etc.) of each partner and their purpose of use in the project.
- For projects aiming new product development, please specify the sufficiency of relevant partners' infrastructure for new product development and design.

Partner Number	Description of facilities/infrastructure	Purpose of Use During the Project	
1			
2			
3			
4			





Use as many lines as needed

4.4 Management of Intellectual Property

(~ ½ page)

- Please specify the project output(s) which might be subject to registration of patent, utility model and industrial design.
- Describe the management of intellectual property rights (A global consortium agreement is strongly recommended to be prepared to manage the intellectual property rights, publication and exploitation plans, as well as management rules between the partners).

Section 5: Impact

5.1 Expected impacts

(~ 1-2 page)

Describe the expected impact(s) of the project in relation to the project objectives using the template below. Wherever possible, use quantified indicators and targets.

Type of impact	Expected Output, Results and Impacts
Scientific/Academic (Article, Proceeding, Part of a book, Book)	
 Economic/Commercial/Social/Environmental (Product, Prototype, Patent, Utility model, Production license, Process Improvement, Variety registry, Spin- off/Start-up company, Audiovisual archive, Inventory / Database / Documentation Production, Work that can be copyrighted, Presented in media, Fair, Project market, Scientific activity (workshop, training where the results of the projects to be used), social impact, environmental impact and other common effects), For the projects aiming new product development, please also answer the following questions; Describe the added value that the project will provide and the contribution of the project output(s) to partner(s)' efficiency and competitiveness. Explain the commercialization potential and domestic/international market share of project output(s) including a brief comparison with other potentially competing products or services and its possibility to replace an imported product. Provide a clear and realistic commercialization plan of project output(s) including the following information: - Time to market (where relevant) Increase in sales rate Increase in market share Breakeven point 	
Researcher Training and Creating New Project(s) (Graduate thesis, National/International new project)	





5.2 Dissemination and exploitation of results

(~ ½ page)

Please state the program of dissemination and exploitation activities (seminar organization, congress presentations, public sector oriented conferences, business plan and others, etc.), excluding specialized publications, planned during the project development. Please clearly explain where and when these activities will be performed.

Type of Activity	Stakeholders and Potential Users	Location, Time and Duration of the Activity		

Use as many lines as needed

Section 6: Ethical issues

(~ ½ page)

Describe any potential ethical issue that may arise during execution of the project. Describe your strategies to be followed to reduce ethical risk.

Section 7: References

Each reference must include the names of all authors, article/journal/book title, volume number, page numbers and year of publication. If the document is available electronically, the website address should also be shared.





Budget Requirements

Please refer to Article 6 the "Financial conditions" of the CSIR-NASB Call 2024

In Lakhs(Rs.)

		Year 1	Year 2	Total
Capital	Minor Equipment			
	Chemical/Consumable			
	Temporary Manpower			
	Contingency			
Recurring	Exchange visits (mobility)* a. Visit of CSIR Scientists to Belarus b. Visit of Belarusian Scientists to India			
	Non-Recurring: Capital			
Summary	Recurring:			
	Total			

*as per the Call announcement/guidelines

Please document the resources brought in the collaboration from Industry participants / Other Institutions involved (Finances in-kind/incash) for participation in the call

Details and Budget Justification

- A. Capital
- B. Recurring