



Advertisement for Call for Proposals IIT Mandi iHub and HCI Foundation Last Date to Apply: 31st March 2023

About iHub:

IIT Mandi iHub and HCI Foundation (iHub) is a Section 8 company established under the National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS). The vision of iHub is “To be an internationally recognized hub that nurtures HCI research, enables technology translation for industry adoption, and scales skill development.” For more information, visit www.ihubiitmandi.in

Call for Proposal (CfP):

IIT Mandi iHub and HCI Foundation at the Indian IIT Mandi under the Department of Science and Technology (DST)’s NM-ICPS **invites research proposals** to develop creative and practically oriented solutions that can be implemented within the budget and timelines. The focus area would be on “**Human-Computer Interaction (HCI)**. HCI is the confluence of Computer Science, Industrial Design, and Cognitive Science. The Principal Investigators (PI) are expected to design and prototype systems, products, or services by applying independent scientific research methodologies. This should help in developing new technology solutions having industry relevance in HCI. The research proposals must be in the broad area of HCI and its industrial applications.

Technology areas under HCI

- Industrial Design/Usability Engineering
- Computer Vision
- Image Processing
- Cognitive Modelling
- Natural Language Processing (NLP)
- AR & VR
- AI & ML leading to Assistive Technologies (e.g., Mental Health, Indian Knowledge system, and its quantification, Brain-Computer Interface)
- AI & ML leading to Experience Technologies (e.g., Simulations, Entertainment, Gaming, Digital taste, smell, and touch)
- AI & ML Leading to Assistive Technologies (e.g., Mental Health, Indian Knowledge System and its quantification, Experience Technologies (e.g., Simulations, Gaming, and Entertainment), and Device-based Technologies (e.g., Social Robots, IoT, Human Drone Interface)

Focus on Industry Adoption

- The development of technology that can be adopted across industries would be the critical goal. To achieve this goal, iHub will focus on proposals with a strong translational component that can result in products, platforms, patents, or initiate a start-up
- Developing technology for adoption across any industry requires a multifaceted approach that includes the collaboration of multiple disciplines, and an entrepreneurship mindset, with a close and critical eye on industry adoption.
- By focusing on proposals with a strong translational component, we can create a future where technology is more accessible and impactful than ever before.
- The researcher should strive for an industry partner to assist in Alpha-Test/ Beta-Test/Product- Market fit for the research base solution with aspired **Technology Readiness Level of 7 (TRL 7)** or above.

Time Frame

Typical proposals are expected to have a one-year timeframe, with exceptional proposals would be provided for up to two years' time frame.

Guidelines to submit the proposal

1. The proposal can be submitted, either individually or in collaboration, by Principal Investigator (PI) from Academia (as per point a) or by Project Leader (PL) on behalf of the industry (as per point b)

Academia:

- a. Research Institute, University with a well-established support system for research. The institute should have been established in India and have NAAC/UGC/AICTE or any equivalent recognition certificate or any other Public/ Government supported organization/Institute of National Importance.

Industry

- a. Company (Startup, Small, Medium, or Large)/LLP incorporated under the Indian Companies Act, 1956/2013 or the Limited Liability Partnership Act, 2008.

2. The PI/PL shall be responsible for the technical and managerial aspects of the project execution.
3. Applicants can submit applications for more than one project by filling up a separate application form for each project. However, iHub may fund only one project at a time from a PI/PL.
4. Project proposal has to be submitted in the prescribed format given in the **Google form***.
5. The applicant from Academia (PI)/Industry (PL) must submit an Endorsement Letter from their parent organization.
6. Applicants with collaborators (Co-PIs) from Academia and Industry must submit endorsement letters from all the participating entities.
7. The support under the program will be provided based on the review of project proposals submitted. The decision of TIH in this regard will be final and binding.
8. The application must be submitted only through the **Google form**.

***Apply here:** <https://forms.gle/YcEX3VUqdu5aCdng9>

Terms and conditions

Equipment purchase

1. All the Assets acquired from the funds will be the property of the iHub and should not be disposed of, encumbered, or utilized for purposes other than those for which the funds had been sanctioned.
2. At the conclusion/ termination of the project, the iHub will be free to sell or otherwise dispose of the Assets which are the property of the iHub.
3. By the end of the project, the equipment should be returned to iHub in good condition; if not returned within the time period mentioned by the iHub, the rent will be charged to the Principal Investigator (PI)/Project Leader (PL) on a basis as decided by the iHub.
4. In case of damaged equipment, PI/PL is responsible for the repair or for providing new equipment to iHub.
5. The iHub has the discretion to give the Assets to the Institutions or transfer them to any other Institution if it is considered appropriate.
6. Major capital expenditure will be done directly via iHub or with iHub approval.

Funds milestone

1. Funds will be released quarterly and based on milestones.
2. The staff hired by the project funds will only work for the project activities, not for institutional activities. Also, the staff salary will be released on a quarterly basis, and staff will be on the payroll of the iHub.
3. The technical evaluation of the Project should be quarterly, and the operational evaluation will be monthly.

Review

1. iHub may designate a Scientist/Specialist or an Expert Panel to visit the Institution periodically to review the progress of the work being carried out and suggest suitable measures to ensure the realization of the objectives of the Project.
2. During the project's implementation, the Institution will provide all facilities to the visiting scientist/specialist or the Expert Panel by way of accommodation, etc., at the time of their visit.
3. The technical evaluation of the project will be done on a quarterly basis, and the operational evaluation will be done on a monthly basis.

Patents and Publications:

1. Investigators are expected to publish research papers emerging from the Project work in leading Journals. All the patents and publications should be published through iHub or by the review from the iHub. The IP Policy of the iHub will govern patents, IP, and other intellectual properties emerging from the project.
2. After the completion of the project, PI/PL and its Host organization are not allowed to file

any patents and IPs in the same field or based on the work done under the project for a 1 year period after project closure without the consent of the iHub. Failing to do so will be a breach of the contract and may invite appropriate action.

General guidelines

1. The organization will maintain a separate audited account for the project individually for recurring and non-recurring. The entire amount of funds will be kept in an interest-bearing bank account. All interests and other earnings against the released fund can be adjusted towards the future release of funds.
2. The iHub reserves the right to terminate the project at any stage if it is convinced that the funds have not been properly utilized or satisfactory progress is not being made.
3. If the PI/PL to whom a fund for a project has been sanctioned wishes to leave the institution/organization where the project is based, the PI/PL will inform the iHub of the same at least six months in advance with suitable justification and reasons and in consultation with the iHub, evolve steps to ensure successful completion of the project.
4. The data pertaining to the project should be systematically collected, scientifically documented, and submitted to iHub, which later would be placed in the public domain. This clause would not be applicable for projects where legal protection of the know-how generated is necessary.
5. Any products, prototypes, programs, and applications developed as part of the project will need to be reported and submitted with full source code, documentation, and instructions as required by the iHub.
6. The PI/PL will furnish details of any past/ongoing plagiarism, image manipulation, or other professionals, or disciplinary case.

