

IIT Bhilai, GEC Campus, Sejbahar, Raipur - 492015

Call For Proposals for Technology Development in FinTech

The Department of Science and Technology, under its National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS), has funded IIT Bhilai to host the Technology Innovation Hub (TIH) for the Financial Technologies (FINTECH) area. IIT Bhilai established Innovation and Technology Foundation (IBITF), a section 8 company on 21st January 2021. IBITF has a mandate of setting up an incubation center, carrying out translational research, IP generation, and Entrepreneurship development, and hosting TIH for FinTech. IBITF is the nodal center for spearheading Entrepreneurship, R&D, HRD & Skill Development, and Collaboration related activities in Financial Technologies.

Financial technologies and tools are undergoing a sea change at both micro and macro level, keeping pace with the enormous advancements happening in the IT domain, and facilitating easy access to the internet and mobile platforms.

Proposal

IBITF is inviting project proposals to create a conducive ecosystem with relevant stakeholders to promote R&D, Innovation, and IP creation in the specified thematic areas of Blockchain, Artificial Intelligence / Machine Learning, IoT, and e-Payments Systems under FinTech such as the development of applications for FinTech including Banking Financial Services and Insurance (BFSI), user-friendly digital e-payment systems having low-cost platforms with minimal human intervention, IoT based Platform as a Service (PaaS), etc.

One of the important targets of TIH mentioned in the DPR is to create a research base in the Cyber Physical Systems in Fintech. To this endeavour IBITF through this Call for Proposals inviting Researchers from the institutions of Higher Learning (Centrally/State Funded Institutions of higher learning or NAAC Accredited Institution with Grade A) in the technological areas of Al/ML, BlockChain, Cryptography, Cyber Security, IoT with the applications in Fintech (Banking, Financial Services, Insurance Sectors, GST, Share Markets etc). The following are a few examples of pilot projects that could be addressed in the proposals.

Metaverse:

- Pilot systems for the creation indigenous Blockchain based metaverse platforms
- E-commerce and e-malls/e-shopping in metaverse
- Security of Non-Fungible Tokens (NFT) and its interoperability with Crypto Currencies
- Prevention and Detection of Financial Frauds in Metaverse

Blockchain:

- Prevention of Crypto currencies crimes and prevention of Money laundering
- Cross chain transactions and settlements in Blockchain based smart contracts
- Pilot systems and Technologies for neo banks for micro-financing/Banking for artisans and street-vendors
- Medical insurance claims settlements

Address: B- 201, GEC Campus, Old Dhamtari Road, Sejbahar, Raipur- 492015 Email: tih@iitbhilai.ac.in Website: www.ibitf.co.in



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AI/ML/Data Analytics/Cyber Security/5G for FinTech:

- Reconciliation of GST invoices and GST Fraud detection
- End-to-end integration of digital payments in supply chains
- Solutions encouraging Local language apps in digital payment
- Digital payment solution helping differently abled (*Divyang* groups
- Insurance Chat bots and Assistance to Insurance Claims
- Divyang Friendly PoS/ATMs
- Prevention of Prank Payment Apps, OTP Frauds, Payment Links/APK
- Cryptography, Post Quantum QKD for secured financial transactions

Guidelines to submit the proposal

- The proposal can be submitted either by individual researchers from institutions of higher learning and research or in collaboration with an Industry with the Principal Investigator (PI) from academia/research organization. The industry partner should contribute financially in addition to providing domain knowledge, data sets etc. Priority would be given for such proposals which address the pain-points of the industry.
- 2. Applicants can submit proposals for more than one project by filling up separate applications for each project. IBITF may support only one project at a time from the PI.
- 3. IIT Bhilai and IBITF would provide all the necessary financial and accounts management, audit, and business development services. The IIT Bhilai/IBITF Entrepreneurship Policy should be followed by the PI.
- 4. The PI is required to submit the progress on the various developments in the form of a report on the technical, financial, and business activities of the startup.
- 5. The application can be submitted through online mode. In case of any problems in submission a copy of the full proposal as per the format along with the necessary enclosures need to be sent by mail to tih@iitbhilai.ac.in
- 6. Please ensure that proposals have a strong translational component that will result in products, patents, or startups. Open-ended research proposals are discouraged.
- 7. All proposals are evaluated and executed as per the Policy and procedures of IBITF. All the IP/patents are jointly owned by the host institute and IBITF. However, the commercial rights of this IP and Transfer Technology rights belong to IBITF.
- 8. Typical duration of the proposals is two-year extendable by another 6 months in exceptional cases.
- Researchers would be encouraged to convert these projects ideas into startups. The startups thus incorporated by the researchers, or the inventors would get the IPR and commercial rights with equity sharing by IBITF as per the startup policy of IBITF.
- 10. The last date for this cohort of applications is 10th September 2022. IBITF reserves right to extend/modify/cancel this CFP.

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Other Terms and conditions:

- 1. The staff hired by the project funds will be only working full-time for the project activities, not for any of the institutional activities. The PI must work majority of his research time for the project. No additional remuneration for the permanent faculty.
- 2. The applicant must submit an Endorsement letter from their organization and sign an MoU with IBITF.
- IBITF shall appoint a Project Review and Steering Group (PRSG) comprising of representatives from academia, industry and other experts. PRSG will periodically monitor the project in all aspects of the project implementation including technical and financial matters.
- 4. The funds are from the grants received from the DST, NM-ICPS the Technology Innovation Hub at IIT Bhilai, thus the actual disbursement of funds depends on receiving of funds from DST.
- 5. Principal Investigator (PI) is expected to publish research papers on the thematic areas in leading journals with due acknowledgements to IBITF.
- 6. All the products, prototypes and applications developed as part of the project will need to be reported to IBITF and will be property of IBITF.
- 7. The Maximum funding is upto Rs. 50 lakhs in an exceptional case which involves in Hardware design & development the funding could be of Rs. 1.0 cr
- 8. For further details and application are available at www.ibitf.co.in
- 9. Mere submission of application does not entail for the award of the project.
- 10. The decision of the IBITF is final and the applicants are bound to follow the instructions of IBITF once the project is awarded.

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Format for Project Proposal under Technology Development in FinTech

1.	Title of the Projec	t						
2.	Thematic Area Under Which Your Project Lies? (IoT/AI/ML/Blockchain/Payments System/(If Others, please specify)							
3.	Proposed Duration of the Project:Months							
4.	Principal Investigator (PI) and Co-Principal Investigators (Co-PIs)							
	Name							
	Designation							
	Department							
	Institution							
	Postal Address							
	E-mail							
	Co-Principal Inve	estigator (PI)						
	Name							
	Designation							
	Department							
	Institution							
	Postal Address							
	E-mail							

5. Aims and Objectives

- 6. Context/Background [Please elaborate on the existing literature relevant to theproject?] (500 words)
- **7. Problems to be addressed** [Technical fallouts in the existing state-of-the-art methods that are proposed to be addressed] (1000 words)
- **8. The novelty of the Project** [Mention how the proposal is novel with respect to the currentstate-of-the-art FinTech?] (250 words)



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- **9. Background work already done**: [This section should elaborate on the business development strategy, product viability, commercialization, etc.] (1000 words) (1000 words)
- **10. Technology readiness level of the project** [This section should elaborate on the technology readiness level in terms of Patents, and papers. Prototypes developed etc., ifany] (1000 words)
- 11. Target beneficiaries (250 words)
- 12. Gantt Chart of activities giving clear milestones for every quarter
- 13. Please mention the deliverables under the following heads with relevant details:
 - Plans of translating the project into Start-ups and Spin-off companies
 - Target number of Publications, Technologies, products, IPRs, etc.
 - Target number of job creations

14. Budget

Head	1st Year	2nd Year	3rd Year	Amount contributed by industry	Amount payable by IBITF
Equipment					
Travel					
Manpower					
Contingencies					
Overhead					
Grand Total					

15. The expertise of PI

- a) Bio-Data of the PI and Co-PI (as per annexure 4)
- b) Infrastructural Facilities available with the investigator
- c) Equipment available with the Institute/ Group/ Department/ for the project:(Related tothis project)
- d) Prior Knowledge/Publications in the relevant area.

Notes:

- Applicants [Principal Investigator (PI) and Co-Principal Investigator(s) (Co-PI(s))]should be Indian citizens.
- Industry participation is desirable. The quantum of funding by IBITF will be commensurate with the industry contribution. Attach Annexure-1, if applicable.
- The project should be submitted in the format as provided along with Annexures 1,2,3,4 through the link, https://www.ibitf.co.in/cfp_form.php on or before 10th Sep, 2022. A softcopy is to be emailed to tih@iitbhilai.ac.in and mention "Proposal for IBITF: Technology Development in FinTech" in the subject line.



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Annexure-1

CONSENT LETTER FROM INDUSTRY PARTNER (On official letterhead)

This is to state that(Name of Industry/Organization) hereby consent to Partner with IIT Bhilai Innovation and Technology Foundation (IBITF) in the proposed NM-ICF Technology Innovation Hub (TIH) in FinTech Technologies. I am aware and agree to the activition mentioned in the proposal under Industry Partnership.	PS
I hereby consent to support the TIH in terms of:	
Contribution in Cash (Rs in Lakh) Contribution in Kind (List activities)	
Summary profile of the Industry is given below: Name of Industry/Organization: Nature of Business: Number of Employees: Annual Turnover:	
I hereby affirm that my Industry/Organization is committed to participating in the proposedTIH as indicated in the proposal including the financial liabilities as provided above.	
Date Head of Industry/Organization	
Place Seal	



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Annexure-2

CERTIFICATE FROM THE INVESTIGATOR

(On official letterhead)

PROJECT Title:

Name(s) of the PI's and Co-PI's:

- 1. I/We agree to abide by the terms and conditions of the grant received from IBITF.
- 2. I/We did not submit this or a similar project proposal elsewhere for financial support.
- 3. I/We agree to open a start-up company to execute the project.
- 4.I/We undertake to submit progress reports, Statement of Expenditure (SE)/ accounts, Utilization Certificates (UC), etc. covering up to 31st March every year till the completion of the project as prescribed by DST.

Date:	Signature of PI/PIs
Place:	
Date:	Signature of Co-Pls
Place:	



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Annexure-3

ENDORSEMENT FROM THE HEAD OF THE INSTITUTION

(On official letterhead)

PROJECT TITLE:

Name(s) of the PI's and Co-PI's:

It is certified that the Institute welcomes the participation of the above as the Principal Investigator(s) and/or Co-PI(s) for the project.

- 1. Certified that the equipment, other basic facilities, and such other administrative and accounting facilities as per terms and conditions of the grant will be extended to the investigator throughout the duration of the project. In case of PI/Co-PI leavingthe institution or proceeding on a long leave during the project period, prior permission will be sought from IBITF before relieving/sanctioning.
- 2. Certified that the investigators will be allowed to open a start-up company (unconditionally) to execute the project, as per the policy of the institute.
- Institute assumes the financial and other management responsibilities of the project including timely submission of Progress Reports, UCs, SEs, and facilitates in conducting of external audits if required.

Name of the Head of Institution
Signature with stamp
Date

Place:



1. Name:

2. Designation:

3. Department:

IT BHILAI INNOVATION AND TECHNOLOGY FOUNDATION (IBITF)

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Annexure-4

PROFORMA FOR BIO-DATA

4. Institution:								
5. Cont	act Number							
6. Ema	il:							
7. Date	of Birth:							
8. Gen	8. Gender:							
9. Acad	demic Qualific	ation: (Unde	ergraduate On	war	ds)			
S.No.	Degree	Year	Subject	l	University/Institu	tion	% of Marks	
10. Wo	10. Work Experience (in chronological order)							
S.No.	Position I	held	Institution		From	То	Pay Scale	



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11.	Professional	Recognition/	Award/ Prize	/ Certificate/	Fellowshi	o received b	y the member

S.No.	Name of Award	Awarding Agency	Year

12. Publications (List of papers published in SCI Journals, in year-wise descending order).

S.No	Authors	Title	Journal	Volume	Page	Year
						_

13. Detail of Patents

S.No	Patent Title	Name of Applicant(s)	Patent No.	Award Date	Agency/Country	Status
				-		

14. Books/Reports/Chapters/General articles etc.

S.No.	Title	Publisher	Year of Publication



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15. List	15. List of Projects implemented						

15.1 Details of Projects in progress

S.No.	Title	Cost in Lakh	Duration	Role (PI/Co-PI)	Agency

15.2 Details of Projects completed

S.No.	Title	Cost in Lakh	Duration	Role(PI/Co-PI)	Agency

16. Any other relevant Information (maximum 500 words)

17. **Mode and extent of Funding:** The funds are from the grant received from the Department of Science and Technology, Government of India, under the National Mission onInterdisciplinary Cyber-Physical Systems (NM-ICPS) for the Technology Innovation Hub (FINTECH) at IIT Bhilai. Thus, the commitment of the funds from IBITF is subject to the grants received from the funding organization i.e., DST, Govt. of India. The actual disbursement of funds by IBITF would be based on reimbursement of actual expenditure against the bills and the advance (if availed of any, needs to be settled within one month of the release).