

2nd Call For Proposals for On-Boarding of Startups
in development of Quantum Technologies at I-HUB QTF Quantum Incubator

The **I-HUB Quantum Technology Foundation (QTF)** is one of the 25 Technology Innovation Hubs (TIHs) funded under the National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS), Department of Science and Technology (DST) to promote development of products based on advanced technologies such as IoT, HCI, Cobotics, Fintech and Quantum Technologies. The I-HUB Quantum Technology Foundation is a Section-8 company promoted by IISER, Pune **dedicated to development of Quantum Technologies.**

The specific objectives of the I-HUB QTF are development of products, strengthening of entrepreneurship ecosystem by nurturing innovation and startups and skill development pertaining to Quantum Technologies. In particular, the I-HUB QTF Quantum Incubator is dedicated to support young and aspiring entrepreneurs in translation of ideas to prototypes. QTF is inspiring the best talents to be entrepreneurs by providing support in the form of fellowship, providing guidance or mentorship and co-working spaces for developing their ideas into products.

As part of the objectives, the I-HUB Quantum Technology Foundation invites proposals under the following startup-support schemes at I-HUB QTF Quantum Incubator from startups or prospective entrepreneurs working in quantum technologies and related areas.

- (1) PRomotion and Accelerating Young and ASpiring Innovators and Startups (PRAYAS) Program to support the conversion of ideas into Proof of Concept (PoC)/Prototype.
- (2) Seed Support System (SSS) to provide early-stage investment to startups.
- (3) Startups for Physical or Virtual Incubation at I-HUB QTF Quantum Incubator

I-HUB QUANTUM TECHNOLOGY FOUNDATION

Dr. Homi Bhabha Road, NCL Colony, Pashan, Pune 411008, Maharashtra, India.
+91 20 2590 8647 | communications@quantech.org.in | www.quantech.org
CIN: U73100PN2021NPL199577

Technology Domains:

The startup proposals should be from the domains of Quantum Information and Metrology, Quantum Communication, and Quantum Materials and Devices. The technologies should specifically be harnessing the potential of the ‘second quantum revolution’ for translation into products. Classical technologies that enable development of quantum devices are also encouraged to apply.

The proposals will be evaluated for technical correctness, feasibility, TRLs and commercialization through a peer review process involving personnel from industry and academia.

The following are the broad areas of the I-HUB QTF, however, the TIH is open to other related projects that have the potential of delivering prototypes or products that broadly satisfy the criteria mentioned above.

Technology Domains
<p>1. Quantum Information and Metrology</p> <p>For the development of components/sub-systems/systems for the following:</p> <ul style="list-style-type: none"> a) Physics package of quantum processors (fully programmable gate-based quantum computers as well as quantum simulators) b) Sensors for magnetic fields and electric fields c) Portable atomic clocks d) Quantum accelerometers and gravimeters
<p>2. Quantum Communication</p> <p>For the development of components/sub-systems/systems for the following:</p> <ul style="list-style-type: none"> a) Portable sources of entangled photons b) Quantum repeaters c) Turn-key Quantum Key distribution systems d) Device independent Quantum Random Number Generators e) Quantum cryptography algorithms and post quantum cryptography algorithms
<p>3. Quantum Materials and Devices</p> <p>For the development of components/sub-systems/systems for the following:</p> <ul style="list-style-type: none"> a) Single photon sensors for visible and infrared regions b) Spintronic devices c) Sensors for electric and magnetic fields d) Sensors/devices based on low dimensional materials e) Sensors/devices based on hybrid nanostructures f) Multifunctional quantum materials for improved thermoelectric, electro/magneto-caloric, opto-electronic and biomedical applications

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4. Enabling Technologies

- a) Instrumentation for enabling design, integration and deployment of quantum systems
- b) Development of Low noise measurement systems
- c) Development and fabrication of data acquisitions and control systems targeted towards enabling the above-mentioned applications
- d) Development and fabrication of arbitrary waveform and signal generators for the above applications
- e) Development of cryogenic electronics systems like amplifiers and filters in low temperature applications
- f) Development of high stability and high precision optical and optomechanical systems, devices and components
- g) Development of complete turn-key frequency tunable and stable laser systems
- h) Development of state-of-the-art cryogenic and vacuum technologies (for eg. Cryostats, pumps, UHV components) and cryogenic measurement systems
- i) Development of nano-mechanical manipulators systems
- j) Development of Non-linear optical crystals and optical frequency convertors

5. Any other proposal that has high relevance to Quantum Technologies

Startup-Support Schemes at I-HUB QTF Quantum Incubator

Important: Please note that startups are required to be registered for Pre-incubation/Incubation Program at the I-HUB QTF Quantum Incubator for the following startup-support schemes. The details about the Pre-Incubation/Incubation Program will be intimated to the shortlisted candidates. The project duration shall be one-year with an annual renewal subject to the approval by the HUB committees.

Scheme I :

PRomotion and Accelerating Young and ASpiring Innovators and Startups (PRAYAS) Program to support the conversion of ideas into Proof-of-Concept (PoC) or Prototype

Objective	To enable translation of an innovative idea to a prototype. The program aims at providing prototype funding to convert an idea into a prototype that has a potential for commercialization to young and aspiring innovators.
Eligibility	<p>➤ An individual innovator without having a startup or is not a founder of a startup can apply for Prayas grant.</p> <p>In case of an applicant being an individual innovator without having a startup applying for PRAYAS:</p> <ul style="list-style-type: none"> • The applicant has to be an Indian Citizen and should be minimum of 18 years of age, as on the date of application. <p>In case of an applicant being a co-founder of a Startup applying for PRAYAS:</p>

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	<ul style="list-style-type: none"> • The applicant has to be an Indian citizen and should be minimum of 18 years of age, as on the date of application. • The startup should be incorporated in India with a minimum 51% of its equity held by Indian citizens. • The startup should be able to develop the prototype for a new product. ➤ The ideas and innovations should be based on Quantum Technologies and enabling technologies as tabulated in Technology Domains table above. ➤ Prototype must be capable of being completed within 24 months. ➤ Innovators should have technical skills or background. ➤ Idea or Innovations should have a roadmap towards commercialization. ➤ Preference may be given to the innovators- <ul style="list-style-type: none"> • having bootstrapped or have co-investment commitments • having clear roadmap for commercialization or start up creation • Women innovators/Young innovators
Support	The maximum funding support will be decided on a case-to-case basis depending upon the technical promise and the resources needed.
Scheme II :	
Seed Support System (SSS) to provide early-stage investment to startups	
Objective	To act as a bridge between development and commercialization of innovative Quantum Technologies/Products/Services by providing financial assistance to potential startups with promising ideas, innovations and technologies. This would enable startups or incubatees to graduate to a level where they will be able to raise investments from Angel/Venture Capitalist.
Eligibility	<ul style="list-style-type: none"> ▪ The applicant has to be an Indian citizen and should be minimum of 18 years of age, as on the date of application. ▪ The startup should be incorporated in India with a minimum 51% of its equity held by Indian citizens.
Support	The maximum funding support will be decided on a case-to-case basis depending upon the technical promise and the resources needed.
Scheme III :	
I-HUB QTF Incubation Program for Startups for Physical/Virtual Incubation	
Objective	To support the development of Quantum Technologies and enabling technologies that support Quantum Technologies at nation's quantum innovation hub.
Eligibility	An Indian national with a registered company and DPIIT startup registration with a background in the area in which he/she wishes to pursue innovation in Quantum Technologies; It could be the

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	development of Quantum Technologies/Product at early to mid to advanced stage. The startup should be incorporated in India with a minimum 51% of its equity held by Indian citizens. The early-stage entrepreneurs without a registered startup may be considered by the HUB committee for incubation provided they complete the company and DPIIT registration process within 3 months of their incubation.
Support	<ul style="list-style-type: none"> • Co-working Space • Infrastructure & Resources Support • Mentoring Support from Quantum Experts • Incubator Programs • Business Plan & Pitch Preparation Training • Industry/Investor Connect • Exchange or Collaboration Opportunities

Instructions

1. Registration and attendance of I-HUB QTF Pre-Incubation/Incubation Program is mandatory for all startup-support schemes and programs.
2. The startup/business project proposal should be submitted as a single soft copy with all enclosures in a pdf format to startup@quantech.org.in
3. The last date of Submission of application is 15th December 2023.
- 4. All proposals will be evaluated and executed as per the policies and procedures of I-HUB QTF with the final decision on evaluation and selection of startups resting with I-HUB Quantum Technology Foundation.**
5. Applicants can submit proposals for more than one startup by filling up separate applications for each proposal.
6. Please fill up the Non-Disclosure Agreement with details and signature and enclose the agreement along with other documents.
7. Attachments/Enclosures as detailed in the form are required for consideration of the proposal by the evaluation committee.
8. For any queries, please contact the I-HUB QTF team at startup@quantech.org.in

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Format for Submission of Startup Proposal

(Registration and attendance of I-HUB QTF Pre-Incubation/Incubation Program is mandatory for all startup-support schemes and programs)

<p>Startup Proposal to be considered for (Please select the relevant program): Seed Funding Program or Idea to Prototype Support Program</p>	
<p>Startup Proposal to be considered for (Please select the type of incubation): Physical Incubation or Virtual Program</p>	

Innovation Details	
Innovation Title/Company focus	
Area of innovation (please refer the Technology Domains table above)	
Sub-area (please refer the Technology Domains table above)	
Founder Details :	
Applicant/Promoter Details:	
Name : Date of Birth : Gender :	

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Aadhar Number :	
PAN Number :	
Mobile Number:	
Email ID:	
Name of the Startup:	
Members of the Startup:	
Mentor/Advisor Details:	
Name of the mentor/advisor:	
Name of faculty member from institute associated with the Startup, if any & Institute Name:	
Company Details:	
Company Name:	
Date of Incorporation:	
CIN Number:	
Name of Directors:	
Registered Address:	
Is your Startup DPIIT registered ? – Yes/No Please provide DPIIT Registration Number:	
Is the startup incubated anywhere ? Incubator Name:	
Company website, if any	
Annual turnover of the company	

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Innovation Details :	
Please provide a detailed document on the proposed innovation (maximum 5-page) (the following pointers may be used to build the document)	
(i) Innovation details – problem and solution; future potential of technology/innovation with a market landscape	
(ii) Justification on consideration of the proposal at I-HUB QTF Quantum Incubator	
(iii) Team Strengths	
(iv) A Roadmap along with timelines	
TRL Status: (1 to 9 scale)	
Intellectual Property (IP) details, if any – owners and IP/application number	
Potential Customer Segment:	
Competitors details:	
Funding Details:	
Funds required to pursue the innovation, please provide a complete split-up	
Provide details of all grants/funds received by the startup	

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Collaborators Details:	
Academic Institute/University Name including faculty name:	
Industry partner name and role:	
International collaborations:	
Details of member of IISER, Pune or I-HUB QTF or DST, if involved:	
Details of any other organisation involved:	
Startup Pitch:	
A 10-slide powerpoint presentation of the Startup Pitch covering problem statement, solution, investment requirement, roadmap with timelines, company shareholding and valuation, team	
Declaration by the Startup Promoter	
Are you willing to register for and attend the I-HUB QTF Pre-Incubation/Incubation Program	Yes/No
Are you looking for Physical Incubation for your startup	Yes/No
Are you looking for Virtual Incubation for your startup	Yes/No
Are you available at Pune for physical incubation	Yes/No
Are you willing to relocate to Pune for incubation	Yes/No
Are you available to dedicate full-time for development of proposed technology or product for your startup	Yes/No

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Attachments & Enclosures	
Resume of all founders/directors	Yes/No
Resume of Mentor/Advisor/Faculty Member	Yes/No
Signed Non-Disclosure Agreement (NDA)	Yes/No
Certificate of Incorporation of the company	Yes/No
MoA of the company	Yes/No
AoA of the company	Yes/No
DPIIT Registration Certificate	Yes/No
SME/MSME/Udhayam Registration Certificate, if applicable	Yes/No/NA
Startup Proposal Document	Yes/No
Startup Pitch	Yes/No
IP supporting document	Yes/No/NA
Annual Financial Statements (Last 2 years)	Yes/No
Income Tax Statement	Yes/No
Company Profile/Brochure	Yes/No
Supporting documents towards funds raised so far by the startup	Yes/No
I agree to abide by the terms and conditions and policies of I-HUB QTF for the incubation of my startup/company at the I-HUB QTF, IISER, Pune	Yes/No
Name	
Designation	
Signature	
Place	

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NON-DISCLOSURE AGREEMENT

This Non-Disclosure Agreement is made on ... day of, 2023.

BETWEEN

I-HUB Quantum Technology Foundation (QTF), Indian Institute of Science Education and Research, Dr Homi Bhabha Road, Pashan, Pune, Maharashtra, India, (hereinafter referred to as 'I-HUB QTF') through the Promoter, of the One Part.

AND

....., a registered under the and having its registered office at (hereinafter referred to as '.....', which expression shall unless it be repugnant to the context or meaning thereof includes its successors and assigns), through its, of the Other Part.

WHEREAS:

The Parties believe that in order to explore the potential business relationship between Parties, either Party may need to disclose certain Confidential Information (*as defined herein*) to the other Party (hereinafter referred to as the “**Purpose**”);

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In consideration of the discussions and sharing of information between the Parties, and the premises, conditions, covenants and warranties herein contained, the Parties agree as under:

1. Definitions :

For purposes of this Agreement, the following terms shall have the following meanings :

- (a) "Confidential Information" shall mean any information disclosed by one party to the other party which the disclosing party considers confidential and which it specifically identifies in writing as confidential.
- (b) "Disclosing Party" shall mean the party disclosing confidential information.
- (c) "Receiving Party" shall mean the party receiving disclosure of the Confidential Information.

2. Applicability:

This Agreement shall apply to all Confidential Information disclosed by the one Party to the other Party.

3. Non-Disclosure Obligations:

- (a) Each Party agrees :
 - (i) to hold the other Party's confidential information in strict confidence;
 - (ii) to exercise at least the same care in protecting the other Party's confidential information from disclosure as the party uses with regard to its own confidential information;
 - (iii) not to disclose such confidential information to third parties; and

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(iv) not to use any confidential information for any purpose except for the purpose for which it was disclosed.

(b) The obligations contained in the above said clause shall survive the expiry or termination of this Agreement.

4. Disclosure to Employees:

Each Party may disclose the confidential information of the other Party, only to its responsible employees on a need-to-know basis. Each Party agrees to instruct its employees not to disclose such confidential information to third parties, including consultants, without the prior written permission of the Disclosing Party.

5. Non-Confidential Information:

Confidential information shall not include information which:

- (a) is now or hereafter becomes, through no act or omission on the part of the party receiving the disclosure, generally known in the software industry and now or later enters the public domain through no act or omission on the part of the party receiving the disclosure;
- (b) is acquired by the Receiving Party before receiving such information from the Disclosing Party and without restriction as to use or disclosure;
- (c) is hereafter rightfully furnished to the Receiving Party by a third party, without restriction as to use or disclosure;
- (d) is information which the Receiving Party can document was independently developed by the Receiving Party;

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- (e) is required to be disclosed pursuant to law, provided the Receiving Party uses reasonable efforts to give the Disclosing Party reasonable notice of such required disclosure;
- (f) is disclosed with the prior written consent of the Disclosing Party.

6. Removal of Confidential Material:

Each Party agrees not to remove any material or tangible items containing any of the confidential information of the other Party from the premises of the Disclosing Party without consent of the Disclosing Party. Each Party agrees to comply with any and all terms and conditions that the Disclosing Party imposes upon approved removal of such material or items, including without limitation that the removed materials or items must be returned by a certain date, and that no copies of the removed materials or items are to be made.

7. Return of Confidential Information:

Upon the request of the Disclosing Party, the Receiving Party will promptly return to the Disclosing Party all materials or tangible items containing the confidential information of the Disclosing Party along with all copies thereof.

8. No Grant of Rights:

Each Party recognizes and agrees that nothing contained in this Agreement will be construed as granting any rights to the Receiving Party, by license or otherwise, to use any confidential information of the Disclosing Party.

9. Equitable and Legal Relief:

Each Party acknowledges that all confidential information of the Disclosing Party is owned solely by the Disclosing Party (and/or its licensors) and that the unauthorized disclosure or use of such confidential information would cause irreparable harm and significant injury, the degree of which may be difficult to ascertain. Accordingly, each Party agrees that the Disclosing Party shall have the right to obtain an immediate injunction from any court of competent jurisdiction enjoining breach of this Agreement and/or disclosure of the confidential information. Each Party shall also have the right to pursue any other rights or remedies available by law or equity for such a breach.

10. Term and Termination:

This Agreement shall be effective from the date it is signed by both the Parties. The term of this Agreement shall be years from the effective date. The Parties may extend the term for further periods as mutually agreed to between the Parties. During this term, the Agreement can be terminated by a prior written notice of not less than three months by either Party.

11. Entire Agreement:

This Agreement represents the entire understanding between the Parties hereto with respect to the subject matter hereof and supersedes any and all prior agreements, negotiations, understandings, representations, requests or documents made or exchanged as between the Parties with respect to such matter.

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12. Amendment to Agreement:

No amendment, modification or change in any of the terms or conditions of this Agreement or waiver with respect thereto, shall be valid and binding upon the Parties thereto unless made in writing and signed by the Parties hereto or by their authorized representatives.

13. Severability:

If any provision of this Agreement is declared to be invalid, void or unenforceable, the remaining provisions of this Agreement shall continue in full force and effect.

14. Waiver:

No waiver by either party, whether express or implied, of any provision of this Agreement shall constitute a continuing waiver of such provision or a waiver of any other provision of this Agreement. No waiver by either party, whether expressed implied or, of any breach or default by the other party, shall constitute a waiver of any other provision of this Agreement.

15. Arbitration:

Any dispute or difference in connection with the validity, interpretation, implementation or alleged breach of any provisions of this Agreement, shall be settled mutually between the exercising authorities. However, if no arrangement/settlement is reached by the exercising authorities, the dispute shall be referred to arbitration to be carried out by a single arbitrator agreed by the Parties and the decision of the arbitrator shall be final and binding on both the Parties. Provisions of the Arbitration and Conciliation Act, 1996 shall

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apply to such arbitration. The arbitration proceedings shall be in the English language and the place of arbitration shall be Pune.

16. Governing Law:

This Agreement shall be governed by and subject to the laws of India.

17. Jurisdiction:

Any disputes, differences or claims arising out of or in connection with this Agreement shall be subject to the exclusive jurisdiction of the Courts at Pune.

IN WITNESS WHEREOF, both the parties have hereunto set and subscribed their hands and seals on the date, month and year hereinabove mentioned.

For and on behalf of
I-HUB QTF

For and on behalf of

Sunil Nair
Project Director

Witnesses:

1. 2.