CALL FOR EXPRESSION OF INTEREST

Proposals for AI/ML-guided Microbial and Protein Engineering (Yeast and *E. coli*)

Reference No: ICGEB/BIOF/CfP-AI/2026-Rolling

1. **Introduction and Rationale**

With funding support from DBT, the ICGEB in New Delhi established India's first Biofoundry in 2025. The aim of the ICGEB-Biofoundry is to accelerate biomanufacturing in India by supporting AI/ML-based strain and protein design and engineering. In this regard, the ICGEB-Biofoundry, New Delhi, invites Expressions of Interest (EoI) from start-ups, industry partners, and academic innovators with projects that utilize AI-guided or rational design to engineer chassis organisms, specifically *S. cerevisiae* and *E. coli*, to produce biological compounds or protein/enzymes of industrial relevance. Biofoundry offers a fully integrated platform designed to accelerate the Design-Build-Test-Learn (DBTL) cycle. The objective is to generate superior microbial strains with high commercial and scientific value.

2. Collaboration and Funding Model

2.1. **Clarity on Financial Model: A User-Facility Approach**

Important: The ICGEB Biofoundry invites applicants to use its professional consultancy and technical services to execute projects. Operating on a pay-to-use model, the facility leverages specialised expertise and infrastructure to execute selected proposals, supporting academic and industrial innovation cost-effectively. **This Expression of Interest (EOI) is for service engagement and is NOT a call for grant funding.**

- **Applicants** (Academia, Startups, Industry) are 100% responsible for securing and bringing their own independent funding to cover all project costs, including personnel, travel, consumables, and other operational expenses.
- All selected projects are subject to Biofoundry Usage Charges as per DBT Usage Charges detailed below in Section 2.2.

2.2. **ICGEB-Biofoundry Pricing Model**

The ICGEB Biofoundry offers specialised consultancy and technical services through access to infrastructure and expert guidance.

Pricing Model as per Department of Biotechnology (DBT)User Access Policy:

User Category	Description	Pricing Model
Category A: Academia	Research Institutes, Universities, and Colleges	At an appropriate cost covering actuals (consumables, HR, overhead).
Category B: Startups	Start-ups, Innovators, and Entrepreneurs	Actual cost plus up to a 5% markup.
Category C: Industry	Private/Section 8 Companies and Large Industries	Actual cost plus up to a 15% markup.

- Option for BRICS institute for free access to the Biofoundry facility: *In exceptional cases only*, limited proposal(s) from BRICS institutes will be supported with minimal charges. Those proposals would be top-tier projects solely to bridge critical R&D gaps.

3. **Proposed Thematic Areas**

Proposals integrating computational prediction with high-throughput experimental validation in the following areas will be considered. Submissions bridged to multiple areas will be prioritised.

Area 1: AI/ML- and other model-guided Strain Engineering for product optimisation

Area 2: AI/ML-Guided and/or rationally designed Protein Engineering, expression, purification, and characterisation

4. **Eligibility and Requirements**

4.1. **Submission Guidelines**

- **Template**: Proposals may be submitted as per **Annexure I.**
- **Components**:
  - **Preliminary Data**: May be included, if available.
  - **NOC**: No-Objection Certificate may be required from the parent institution/company.
  - **Computational Proof-of-Concept (C-POC):** Applicants who provide a C-POC (e.g., a code repository or an *in-silico* model) will be preferred.

5. **Policy Guidelines and Dates:**

All projects are governed by the DBT/BIRAC User Access Policy. Key guideline(s) include

5.1. **Intellectual Property (IP) & Data Sharing**

- The ICGEB Biofoundry will not claim any intellectual property or co-authorship for services provided. However, the work done at the Biofoundry must be acknowledged in all communications (publications, presentations, etc.). User data and strains generated during project execution will be retained for up to 2 years after the project's completion date.

5.2. **EOI Timeline**

Action	**Timeline / Date**
Proposal Submission	**Open continuously (Rolling Call)**
Review Cycles	**Evaluated quarterly (or on a regular periodic basis)**
Notification of Selected Projects	**Within 4 weeks of the review cycle completion**
Signing of MoA	**Within 2 weeks of project selection notification**

5.3 **SUBMISSION PROCESS**

Applications must be submitted via email. Hard copies are not required.

- **Recipient Email**: biofoundry@icgeb.res.in
- **Email Subject Line**: EoI Submission CfP-Rolling: [Your Organization Name] - [Project Acronym]
- **File Naming Convention**: ICGEB_EoI_[ApplicantName][Organization].pdf

5.4. **Contact Information**

The Nodal Officer/In-Charge, Biofoundry Facility

- Email: biofoundry@icgeb.res.in
- Address: ICGEB, Aruna Asaf Ali Marg, New Delhi - 110067

ANNEXURE I: Expression of Interest Template

Biofoundry ICGEB: Expression of Interest Template

- **Call for Proposals:** [ICGEB/BIOF/CfP-AI/2026-Rolling]

Please adhere to the specified section lengths. The complete proposal should not exceed 10 pages.

Section 1: General Information

1.1. **Project Title**: (Concise and descriptive title)

1.2. **Project Acronym**: (A short acronym for easy reference)

1.3. **Applicant Details**: (Name, Position, Dept, Institution, Email, Phone)

1.4. **Co-Applicant(s) Details**: (Name, Position, Institution, Email, Phone)

1.5. **Abstract / Project Summary**: (Max 300 words. Summary of problem, solution, and impact)

Section 2: Scientific Background & Rationale

2.1. **Introduction & Scientific Background**: (Max 100 words. Current state of the field, knowledge gaps)

2.2. **Project Aims and Objectives**: (Bulleted list, Max 100 words. Specific, measurable objectives)

2.4. **Applicant and Team Capability**: (Expertise of the Applicant and key team members)

2.5. **Relevant Publications**: (List up to 5 most relevant publications)

2.6. **Preliminary Data & C-POC**: Include Proof of Concept data and Computational Proof of Concept, if available

Section 3: Declarations

3.1. **Organizational/Company Incorporation details**: Date of incorporation with DPIIT… etc. Submission is required, if applicable.

3.2. **Biosafety Level (BSL) Declaration**: (State if BSL-1 or BSL-2)

3.3. **Declaration:**

I confirm that the information provided in this application is accurate and complete. I have read and understood the Terms of Reference for this Call for Proposals.

Signature of PI: _____

Date: _____

NOTE:

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