

## EXPRESSION OF INTEREST ( E.O.I )

for

## Supply of Lyophilizer



**CSIR-INSTITUTE OF HIMALAYAN BIORESOURCE TECHNOLOGY**  
(Council of Scientific and Industrial Research)  
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## **EXPRESSION OF INTEREST (EOI)**

CSIR- Institute of Himalayan Bioresource Technology ( CSIR – IHBT ) Palampur, HP, India is one of the premier laboratories under Council of Scientific and Industrial Research, an autonomous body under Department of Scientific and Industrial Research (Government of India), New Delhi.

Situated among pristine environ in the lap of Dhauladhar ranges, CSIR-IHBT is the only laboratory of the Council of Scientific and Industrial Research in the State of Himachal Pradesh (H.P.), India. Institute has a focused research mandate on bioresources for catalysizing bioeconomy in a sustainable manner.

The institute has: state-of the art laboratories; remote sensing and mapping facilities; internationally recognised herbarium; animal house facility; pilot plants in nutraceuticals, essential oil and herbals; farms and polyhouses. The young and dynamic team of scientists propel the research and work dedicatedly to discover and find solutions to new challenging problems faced by the society. International collaborations further strengthens scientific interactions at a global scale. Promoting industrial growth through technological interventions is a constant endeavour and several technologies developed by the institute are transferred to industries. For socio-economic upliftment, regular training programmes and advisory services are rendered to farmers, floriculturists, tea planters and small entrepreneurs involved in food processing sector. Institute has been recognised as one of the Incubation Centres by MSME GoI and in the area of Affordable Health Care by DSIR. Institute encourages industries to share the technological problems faced them, such that efforts could be made in developing a viable solution. Confidentiality is strictly maintained. Work on plant adaptation studies and high altitude medicinal plants are further strengthened by the field lab "Centre for High Altitude Biology (CeHAB) situated at Ribling in Lahaul & Spiti district of H.P. Through this centre, institute disseminates technologies by way of trainings and demonstrations that could transform the economy of the region and help in solving unique challenges faced by them. Institute fosters student-scientist interaction and school children are welcome to visit the Institute. Post graduate students can do project and sharpen their research skills at CSIR-IHBT. Young researchers are welcome for to do Ph.D in cutting edge areas under the able guidance of expert faculty. Institute passionately contribute its bit in the development of society, industry and environment.

With the above back ground, An Expression of Interest (EoI) is initiated at CSIR- IHBT with the prospective manufacturers, their authorized channel partners or agents/suppliers and system integrators to discuss with the Technical Committees on the aspects of utility, technology, feature, literature, design, technical parameters, clientele and other related issues of the equipment and material for the following items to be procured for CSIR-IHBT

<b>Sl. No.</b>	<b>File No.</b>	<b>Item Description</b>
01.	4/5(322)19 - Pur	Lyophilizer

1. **The address for submission of document and for obtaining further information:**

Controller of Stores & Purchase  
CSIR – IHBT, Palampur -176061,  
Himachal Pradesh (INDIA)  
Tel. 91-01894-230425 / e-mail : spo@ihbt.res.in

2. The Bidding document can be downloaded free of cost directly from Central Public Procurement Portal (CPPP) of Government of India website <http://eprocure.gov.in/epublish/app> and CSIR-IHBT website [www.ihbt.res.in](http://www.ihbt.res.in)
3. **Schedule for submission:** The prospective bidders should adhere to due dates specified in Tender Details corresponding to this Tender. The Schedule for Submission of proposals and Opening of proposals is as follows, through portal [etenders.gov.in](http://etenders.gov.in)

Date & Time of Submission of proposals		Date and Time of Opening of proposals	
Date	Time (IST)	Date	Time (IST)
3rd December 2019	11:00 Hrs	3rd December 2019	12.00 Hrs

4. **PRESENTATION BY BIDDERS. Presentation by bidders** is scheduled for 19.11.2019, from 10.30 a.m. onwards. Venue is CSIR- IHBT – J.C Bose Conference Hall. **Interested bidders are requested to send email to [spo@ihbt.res.in](mailto:spo@ihbt.res.in) confirming their willingness for making their presentation, on or before 15.11.2019 - 4.00 p.m.** Bidders will be allotted time slots to make presentations

- a. on their products profile in brief
- b. detailed specifications and
- c. technical capabilities.

5. The bidders' representatives who will make the presentation should possess all the technical details of the machinery, its capacity, complete information on the company, previous experience, various technologies involved, service centres available in India / abroad and financial capabilities to execute project. The representatives should be capable enough to answer all queries of the Technical Sub Committee.
6. The Technical Sub Committee ( TSC ) shall finalize specifications after knowing/obtaining details about relevant/available technology in the market suiting to the requirement and R&D needs of CSIR – IHBT.
7. For evaluating the responses, CSIR-IHBT may call for further presentations of their case in person or Presentation can be considered via Skype/Video Conferencing also.
8. The Director, CSIR- Institute of Himalayan Bioresource Technology ( CSIR – IHBT ) Palampur HP, India reserves the right to accept or reject any or all EOI Notification/tenders/offers or withdraw the Notice at any stage of processing without assigning any reason whatsoever, such an event would not cause obligation of any kind to CSIR- IHBT

- Controller of Stores & Purchase

## **1. INTRODUCTION**

CSIR IHBT requires the Lyophilizer for the freeze drying of protein and its aseptic sealing in glass vials to stabilize it for storage and further end uses.

## **2. OBJECTIVE**

The objective of this EOI is to receive complete technical proposals, detailed specifications of various machinery / process involved, study drawings, study plant lay outs, understand various technologies and processes involved, understand bidder capabilities to execute such supplies and then finalize specifications, list of machinery / items etc and also set eligibility criteria for bidders etc.

## **3. SCOPE OF SUPPLY**

1. Vessel capacity
  - Capacity of ice removing drying rate/ performance: 10 kg or 10 lts in 24 hours or better.
2. Vessel design
  - Product chamber with at least 3 temperature controlled (silicone oil based) shelves (temperature range: -45°C to +50°C) or better for vials applications.
  - Total shelf surface area  $\geq 0.40 \text{ m}^2$
  - Distance between shelves:  $\geq 70 \text{ mm}$  enough to accommodate 50 ml and 100ml vials along with split-rubber stopper.
  - Inbuilt vial sealing/stoppering device.
3. System should have inbuilt sample pre-freezing facility.
4. Material of construction: The chamber, ice condenser, shelves and other product related parts must be made up of SS 316L and mechanical/electro-polished to Ra value  $\leq 0.8 \mu\text{m}$ .
5. Controller
  - Microprocessor/PLC controller for system operation and parameter settings such as ice condenser temperature, vacuum pressure with proper units.
  - Graphical user interface with process control software for visualization, operation and recording.
  - Capability to input and store a minimum of 10 user-defined individual freeze drying programs.
6. Ice condenser temperature: minimum – 80°C or better.
7. Vacuum control for optimization/reduction of process times through pressure control valve to reduce drying process time.
8. Rapid defrosting (heating of the ice condenser).
9. Vacuum pump
  - Hybrid vacuum pump system consisting of two-stage rotary vane vacuum pump and two-stage corrosion resistant diaphragm pump.
  - Volumetric displacement/pumping speed  $\geq 300 \text{ liters/min}$ .
  - Ultimate total pressure  $\leq 0.005 \text{ mbar}$ .
  - Oil mist trap/eliminator.
10. Any failure during cycle should trigger the alarm & show detail message of error.

11. With LCD/LED graphic display facility for product phase monitoring and automatic end-point determination of drying cycle.
12. System build in-high capacity double cascade based refrigerator systems, with CFC-free refrigerant.
13. Facility for arrangement and record of process data in the freeze dryer flow sheet such as product temperature, ice condenser temperature, shelf-temperature, vacuum etc. for process validation and compatible to export data from the system in the form of MS EXCEL and PDF.
14. Shall have a clear warning alarm when the system operates at suboptimal parameters.
15. Certifications: ISO9001, CE.
16. Documentation: Should Provide IQ/OQ documents and performance at site as per cGMP standard.
17. Spare parts (one set of all O rings, gasket, freeze dryer door gasket) and preventive maintenance kit should be provided.
18. The company should also supply below mentioned items along with
  - Oil for vacuum pump: 50 liters.
  - Oil mist trap/eliminator: 10 nos.
  - Vacuum tester for checking vacuum in vials.
  - Following vials along with split-rubber stopper, aluminum seal and seal crimper
    - 1000 nos. of 50ml vials.
    - 500 nos. of 100ml vials.
19. A set of operating and maintenance manuals complete with parts list and assembly drawings to be provided.
20. Warranty: 02 years from the date of installation.
21. AMC for 03 years after expiry of warranty must be quoted.
22. Compliance certificate: A compliance table in addition to marking in technical brochure (quoted models) as per the specifications point by point must be submitted by the vendor.

#### **4. Eligibility Criteria**

##### **Technical**

1. Original Equipment Manufacturers (OEMs) / Authorized Agent who have proven expertise in successful supply of Lyophilizer. **The bidder should have successfully supplied and installed at least one Lyophilizer of similar specifications, in the last 2 years as on the date of bid submission. Documentary evidence to this effect shall be attached to the EOI / Proposal.**

##### **Commercial**

1. The bidder should not have been black listed / holiday listed by any other CSIR laboratory, or by any other R&D organization or by Government of India. A self declaration letter in this regard must be enclosed.

##### **2. Proposals**

###### **1. Technical**

- a) Detailed specifications of various machinery / instruments involved supported by technical brochures / data sheets in English. The Bidder shall provide the complete technical information (without any IP related material) with specific OEM name, Model Number etc.

- b) Write up / detailed brochure / datasheets on the technologies / techniques involved.
- c) Electrical requirements – voltage, frequency, single phase / three phases, total power consumption in kwh.
- d) Requirement of special foundation / flooring for each machine. If required, then clear details.
- e) Plant lay out drawing in English. Dimensions must be in Metric (mm / cm / Metres).
- f) Other utilities required
- g) Air conditioning, UPS requirements if any.
- h) Stabilized power supply requirements (like servo stabilizer etc.).
- i) Backup power supply like diesel generator requirements
- j) Total space for plant requirements

**2. Bidder Information**

- a) Company information – Status of bidder, registration certificate, and detailed write up about bidder history.
- b) Details of Personnel – Details of all key technical, commercial and service personnel.
- c) Details of Production capacity, location of factory involved in production of machinery etc.
- d) Details of financial information about company in the last 3 years, like turnover, copies of audited balance sheet etc.
- e) Copy of solvency certificate from banker.
- f) Details of service setup in India.
- g) Self certified letter about holiday listing / black listing in bidder letter head.
- h) If dealer / authorized channel partner / distributor etc. Manufacturer authorization letter.
- i) Copies of Purchase orders / contracts of similar supply made in the last 2 years and the performance certificate from the respective clients.
- j) The Bidder shall indicate the timelines necessary for supply / installation / commissioning of the items under Scope of Work.

**Similar Work Experience Details:**

Sl. No.	Name of the work with location	Date & Ref. no of completion certificate (If available)	Date of start Cost of work	Reference document (Work Order/ Work Completion Certificate) to be attached, mention page no

- 3. Commercial: The Bidder may submit a Budgetary Estimate for all the items under the Scope of supply. The Budgetary Estimates shall be held confidential and will not be disclosed to other Bidders after the EOI responses are opened.

## 5. Other Terms

### Purchase of EOI Document

The Expression of Interest document shall be downloaded from Central Public Procurement Portal (CPPP) of Government of India website <http://eprocure.gov.in/epublish/app> and CSIR-IHBT Website [www.ihbt.res.in](http://www.ihbt.res.in) free of cost.

### Clarifications on the EOI Document

Any clarification in the EOI document may be sent in writing to the following through email:

Controller of Stores &Purchase  
e-mail [spo@ihbt.res.in](mailto:spo@ihbt.res.in)

However, no extension of the time or date of EOI submitted will be provided on the ground that CSIR-IHBT has not responded to any query/clarification raised by any Bidder.

### Amendment of Terms and Conditions of EOI

CSIR-IHBT may at its discretion or as a result of a query, suggestion or comment of a Bidder, may modify the EOI document by issuing an amendment or a corrigendum at any time before opening the EOI. Any such Addendum or Corrigendum will be uploaded on CPPP Portal <http://eprocure.gov.in/epublish/app> and CSIR-IHBT's website and the same will be binding on all the Bidders, as the case may be.

CSIR-IHBT at its discretion may extend the due date of submission of EOI and the decision of CSIR-IHBT in this respect would be final and binding on the respondents. In the event of changes in the time schedule, CSIR-IHBT shall notify the same only through its CSIR-IHBT website [www.IHBT.res.in](http://www.IHBT.res.in). Interested Bidders are advised to check the above website regularly for corrigendum / addendum, if any, which will be published only in the web site.

No oral modification or interpretation of any provisions of this EOI shall be valid. Written communication shall be issued by CSIR-IHBT when changes, clarifications or amendments to the EOI document are deemed necessary by CSIR-IHBT at its sole discretion.

EOI submission should be in English language. EOI response should be free from correction, over writing, erasures etc. Duly authorized representative of the Applicant shall sign on each page of the EOI documents. EOI documents should be prepared in such a way so as to provide a straight forward, concise description of Applicant and capabilities to satisfy the requirements of this EOI.

If at any time during the examination, evaluation and comparison of EOI, CSIR- IHBT at its discretion can ask the Bidder for the clarification of its EOI. The request for clarification and the response shall be in writing. However, no post submission of EOI, clarification at the initiative of the Bidder shall be entertained.

Canvassing by respondents in any form, including unsolicited letters on EOI submitted or post corrections shall render their EOI response liable for summarily rejection.

The cost or charges incurred in preparation and submission of EOI response shall not be entitled by any respondent.

Conditional offers will be summarily rejected. EOI which is found to be incomplete in content and / or attachments and / or authentication etc. is liable to be rejected.

No Agent/Agents or third party/parties are engaged by CSIR-IHBT in this process.

CSIR-IHBT is not responsible for any firm/agency expression or representing to express himself/herself/themselves to be the agent or third party representing CSIR-IHBT in this process.

It is advised to deal directly with CSIR-IHBT representative who is the signatory to this document. Disregard of any instruction may result in offer being ignored.

EOI that are incomplete in any respect or those that nor consistent with the requirements as specified in this document may be considered non-responsive and may be liable for rejection and no further correspondence will be entertained with such Bidders.

All cost and expenses associated with submission of EOI shall be borne by the Bidder while submitting the EOI. CSIR-IHBT shall have no liability, in any manner in this regard, or if it decides to terminate the process of short listing for any reason whatsoever.

#### **NON-COMMITTAL EOI.**

After short listing of bidders at this EOI stage, the second stage bidding may not be restricted to short listed bidders only and CSIR – IHBT may resort to Open / Global Tendering for further participation by potential bidders. This may please be noted by all concerned.

(S.GNANAPRAKASAM)

- **Controller of Stores & Purchase**