

सीएसआईआर-केन्द्रीय औषधीय एवं सगंध पौधा संस्थान

CSIR-CENTRAL INSTITUTE OF MEDICINAL & AROMATIC PLANTS

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फाईल संख्या / File No.-CIMAP/PUR<mark>-651(1)/202</mark>4

दिनांक/ Date 07.02.2025

खुली निविदा- बोली पूर्व सम्मेलन/Open Tender- Pre-Bid Conference Document ई-निविदा हेतु आमंत्रण/Invitation for e-Tender

निदेशक, सीएसआईआर-सीमैप, लखनऊ नीचे वर्णित सामग्री हेतु मूल उपकरण विनिर्मातों, उनके वितरक, अधीन प्राधिकृत को निम्नलिखित मद हेतु द्वि-पद्दती पर आधारित ई-निविदा जमा करने हेतु आमंत्रित करते हैं। इसकी सूचना <u>https://etenders.gov.in/eprocure/app</u> पर उपलब्ध है। संबन्धित दस्तावेज़ संस्थान की वेबसाइट <u>www.cimap.res.in</u> पर भी उपलब्धहै/ Director, CSIR-CIMAP, Lucknow invites original equipment manufacturers, their authorized distributors and Indian agents, if any, for submission of e-quotations in two bids system. For complete NIT documents kindly refer to <u>https://etenders.gov.in/eprocure/app</u>. Its intimation has also been given on Institute's website <u>www.cimap.res.in</u>.

| क्रम सं०/ S.No. | मद का नाम/ Name of the item | मात्रा/ Quantity | बिड़ सिकुरिंग/ईएमडी डिक्लेरेसन/ BSD/EMD Declaration |
|--------------------|--|---------------------|---|
| 1. | Supply, Installation and Commissioning of 100 L & 500 L Biofermenters with Single Control Panel to Fully Automatic Control of Both (02 Nos.) Biofrermenters. E-tender ID: 2025_CSIR_226082_1 Detailed specifications are mentioned in Annexure- 17 | 01 Set | Bid Securing/EMD Declaration(format attached) Form must be submitted on the letter head of the firm in Techno-commercial (Part-I) Bid. (Non-submission will result in the bid rejection) |

कृपया ध्यान दें/Please note-

- (i) संस्थान द्वारा एक बोली पूर्व सम्मेलन (प्री बिड कॉन्फ्रेंस) इस निविदा की टर्म, कंडीशंस और स्पेसिफिकेशन को फाइनालाइज् करने के लिए सीएसआईआर-केन्द्रीय औषधीय एवं सगंध पौधा संस्थान, नियर कुकरैल पिकनिक स्पॉट रोड, लखनऊ, उत्तर प्रदेश, भारत आयोजित किया जा रहा है/In order to finalize terms, conditions and specifications of this NIT a Pre-Bid Conference (PBC) is being organized by this Institute at CSIR-CIMAP, Kukrail Picnic Spot Road, Lucknow-226015.
- (ii) बोली पूर्व सम्मेलन में भाग लेनेवाले बोलीदाता इस निविदा के स्पेसिफिकेशन, टर्म और कंडीशंस के देख लें, यदि कोई स्पष्ट्ता चाहे तो समिति के सदस्यों से चर्चा कर सकते हैं।कृपया ध्यान दें कि संस्थान उनके सभी सुझावो को मानने के लिए बाध्य नहीं है /In PBC the participating bidders are requested to see the specifications, terms and conditions of the NIT and may discuss the same with the Committee Members for their

clarifications, if any. Please note that Institute is not bound to accept their all advices/suggestions.

- (iii) बोली पूर्व सम्मेलन का दिनांक, समय व स्थल- / Date and time for the Pre-Bid Conference will be: 03.03.2025 at 11:00 A.M (IST)
- (iv) बोलीदाता नए एवं संशोधित एनआईटी के टर्म, कंडीशंस और स्पेसिफिकेशन के अनुसार अपना बिड अपलोड करेंगें/ Bidders are required to submit their bids according to the Revised NIT after PBC.
- (v) ई-निविदा खोलने का स्थल: सीएसआईआर-केन्द्रीय औषधीय एवं सगंध पौधा संस्थान, नियर कुकरैल पिकनिक स्पॉट रोड,, लखनऊ, उत्तर प्रदेश, भारत होगा/ CSIR-CIMAP, Near Kukrail Picnic Spot Road, PO CIMAP, Lucknow, Uttar Pradesh, India will the venue of online-bid opening.
- (vi) ई-निविदा जमा करने की अंतिम तिथि व समय/ Last Date & time for online bid submission: 07.04.2025 at 11:00 A.M (IST)
- (vii) ई-तकनीकी निविदा खोले जाने की तिथि व समय/ Date & time for opening of online techno-commercial bids: 08.04.2025 at 11:00 A.M (IST)

2. इच्छुक बोलीदाताओं से अनुरोध है कि वर्णित सामग्री हेतु बोली भरें/ Interested Bidders are requested to submit the bid for the quoted item.

3.इच्छुक बोलीदाता उपरोक्त विषय में अतिरिक्त जानकारी भंडार एवं क्रय अधिकारी, सीएसआईआर-सीमैप, लखनऊ, भारत से प्राप्त कर सकते हैं/ Interested Bidders may obtain further information from the office of the Stores & Purchase Officer, CSIR-CIMAP, Lucknow, UP, INDIA.

4. वे बोलीदाता, जो अपने मूल विनिर्माताओं के बदले ई-बोली जमा करतें हैं,उन्हें अनिवार्य रूप से इस ई-निविदा हेतु प्राधिकृत होने से संबन्धित वांछित प्रमाण प्रस्तुत करना होगा अन्यथा उनकी बोली निरस्त की जा सकती है/ Bidders who are submitting their online bids on behalf of their principal should submit proper authorization certificate indicating them to online bid for this tender, failing to which the bid will rejected.

5. ई-निविदा प्रपत्र,जमा करने की अंतिम तिथि व समय के भीतर जमा होने चाहिए/ The on line bids must be submitted on or before the last date & time for submission of tender.

6. यदि बोलीदाता एक से अधिक मदों के लिए अपनी निविदा जमा करना चाहता है तो उसे हर मद के लिए अलग से निविदा पत्र जमा करना होगा जिन पर स्पष्टतौर से मिसिल संख्या व मद संबंधी विवरण अंकित होना चाहिए। ई-निविदा प्रपत्र फ़र्म के लेटरहैड पर स्पष्टतौर से टंकित/ कम्प्युटर टंकित होना चाहिए/ In case, if the bidder is interested in submitting his online bid for more than one item, than he should submit all the bids separately clearly indicating the file reference number & particulars of item. Bid should be neatly typed/ computerized on the letter-head of the firm. If any cutting is there, it should be duly certified.

7. सभी ई-निविदाएँ उपरोक्त निर्दिष्ट बोली प्रतिभूति घोषणा पत्र (ईएमडी डिक्लेरेसन) के साथ निर्धारित समय व तिथि के भीतर आवश्यक रूप तकनीकी-व्यवसायिक निविदा (भाग-1) के साथ जमा हो जानी चाहिए। ईएमडी डिक्लेरेसन लेटर प्रपत्र इस ई-निविदा के साथ संलग्न है। नियत समय व तिथि पर ई-निविदाएँ खोली जाएंगी। बोलीदाता अथवा उनके वाजिब प्रतिनिधि यदि चाहें, तो ई-निविदा खुलने के समय व तिथि पर मौजूद रह सकते हैं। किसी कारणवश,यदि ई-निविदा जमा करने या खुलने की तिथि पर अवकाश अथवा कार्यालय बंद रहता हैतो ई-निविदाएँ जमा व खोलने का समय अगले कार्यदिवस में उसी नियत समय होगा/ All bids must be accompanied by a bid securing declaration (EMD declaration) as specified above and must be submitted along with Techno-commercial bid (Part-1) on or before the date and time indicated above. EMD declaration format is attached with this NIT. Online Bids will be opened in the presence of Bidders' representatives who choose to attend on the specified date and time. In the event of the date specified for bid receipt and opening being declared as a closed holiday for purchaser's office, the due date for submission of bids and opening of bids will be the following working day at the appointed time.

8. बोलीदाता यह भली-भांति सुनिश्चित कर लेंकि उनके द्वारा जमा किया गया ई-निविदा प्रत्र इस कार्यालय द्वारा की गई चाही गई अहर्ताओं व मांगी गई समस्त जानकारियों को निर्धारित प्रपत्रों पूरा भरने के उपरांत जमा किया गया है। यदि जरूरी हो तो जानकारियों के लिए अतिरिक्त शीट का प्रयोग किया जा सकता है। सक्षम व्यक्ति द्वारा सम्पूर्ण निविदाप्रपत्र मुहर अंकित व हस्ताक्षरित किया चाहिए/ Bidders are required to ensure that the e-tender documents submitted by them fulfil the requisite qualifications and required information given in the prescribed formats. Additional sheets may be used, if required. The complete tender documents should be page numbered with index, signed and stamped by the authorized signatory of the bidder.

9. सीएसआईआर-सीमैप के मांगे जाने पर बोलीदाताओं को अपनी निविदा में संलग्न किये किसी प्रपत्र/ प्रमाणपत्र को मूलरूप में सत्यापन हेतु प्रस्तुत करना होगा, विसंगति होने पर संबन्धित खरीद प्रक्रिया के किसी भी स्तर से निष्काषित किया जा सकता है/ On demand by CSIR-CIMAP, the bidder will have to produce the original document/ certificate submitted with the quotation for the purpose of verification, Mis-match can lead into rejection at any level of the concerned procurement process.

10. बोलीदाताओं को इस संस्थान में होने वाली खरीद प्रक्रिया में सीएसआईआर के क्रय नियमों की पूर्णतया पारदर्शिता व ईमानदारी से पालन करना होगा, अवहेलना करने पर संबन्धित खरीद प्रक्रिया के किसी भी स्तर से निष्काषित किया जा सकता है/Bidders should follow CSIR Purchase rules (available at <u>www.csir.res.in</u>) with complete transparency and honesty, violation can lead into rejection at any level of the procurement process.

11. एमएसई,मेक इन इण्डिया एवं स्टार्ट-अप फर्म्स इस ई-निविदा में भाग लेने हेतु आमंत्रित हैं। उन्हे ईएमडी,यदि कोई हो,व टर्नओवर मानदंडों में छूट है परंतु तकनीकी विशिष्टताओं व आवश्यकताओं को पूर्ण करना होगा। उनके संदर्भ में भारत सरकार के अधिनियम लागू होंगे। इस प्रकार की छूट पाने के लिए संबन्धित आपूर्तिकर्ताओं को समस्त वांछित दस्तावेज़ संलग्न करने होंगे**।ध्यान रहे कि**,इस प्रकार के प्रपत्नों में असत्यता पाये जाने पर सक्षम प्राधिकारी द्वारा फ़र्म को निष्काषित /अन्य कोई यथोचित कार्रवाही की जा सकती है। इन बोलीदाताओं को भी अपनी भाग -1 निविदा के साथ लोकल कंटैंट प्रमाणपत्र एवं निर्दिष्ट बोली प्रतिभूति घोषणा पत्र (ईएमडी डिक्लेरेसन, यदि मांगी गई हो तो) (जो कि निविदा के साथ संलग्न हैं) प्रस्तुत करना होगा।/MSE, Make In India and Startup firms are invited to participate in this e-tender. These firms are exempted from submitting of EMD, if any, and turnover criteria's But they have to comply with the specifications and technical parameters. The Govt. of India rules are applicable for the MSE, Make in India and Start-up firms. In order to seek the desired relaxation, the concerned suppliers are required to enclose all the concerned and essential indicating their status. It may be take care that any inconsistency/ false declaration in such documents will lead to debarring/any other deemed fir action by the Competent Authority. These bidders are also required to submit the local content certificate and Bid security Declaration, (BSD/EMD Declaration, if sought in NIT (formats attached with the NIT) with their Part-1bids.

14.इस टेंडर में भारत सरकार द्वारा परिभाषित श्रेणी-I स्थानीय आपूतिकर्ता/ बोलीदाता व श्रेणी-IIस्थानीय आपूतिकर्ता/बोलीदाता ही भाग ले सकते हैं।ये बोलीदाता अपनी तकनीकी-व्यावसायिक (भाग-I) बोली के साथ लोकल कंटैंट प्रमाणपत्र संलग्न करेंगे ।लोकल कंटैंट प्रमाणपत्र का प्रारूप इस निविदा प्रपत्र के साथ संलग्न है। । क्रय वरीयता में श्रेणी-I स्थानीय आपूतिकर्ता/बोलीदाता से अपुरीक्तर्ता पर भारत सरकार के नियमानुसार वरीयता में श्रेणी-I स्थानीय आपूतिकर्ताको श्रेणी-IIस्थानीय आपूतिकर्ता पर भारत सरकार के नियमानुसार वरीयता प्रदान किया जाएगा गैर-स्थानीय आपूतिकर्ता/बोलीदाता से अनुरोध है कि वे कृपया इस खुली निविदा में भाग न लें। विस्तृत विवरण निविदा के जीसीसी 2.40 पर अवलोकन किया जा सकता है /Class-I Local Supplier and Class-II Local Supplier, categories as defined by the Government of India are invited to participate in this NIT. They are required to attach Local Content Certificate (LCC) in their techno-commercial (Part-I)bid. The format of LCC is attached with this NIT. In procurement Preference Class-I Local Supplier will be given preference over Class-II Local Supplier as per the guidelines prescribed by Government of India. Non Local Supplier (apart from above class-I and class-II) are requested not to submit their bid for this Open Tender seeking quotation in INR. Details can be perused in this NIT at GCC 2.40.

15. बोलीदाता ध्यान दें कि मूल्य स्वरूप प्रारूप (BOQ) में केवल उपस्कर का मूल्य उसकी स्टैण्डर्ड वारण्टी एवं सम्बन्धित टैक्स का ही उल्लेख करें। साथ ही प्राईस बिड (PDF) में उपस्कर का मूल्य उसकी स्टैण्डर्ड वारण्टी एवं सम्बन्धित टैक्स + एक्सटैण्डेड वारण्टी +AMC/CMC (वार्षिक दर के आधार पर), जैसा कि इस निविदा में वांछित है के आधार पर ही अपने मूल्य को दर्शाएं। मूल्य निविदा का मूल्यांकन PDF में वर्णित तीनों घटकों के आधार पर LQ1 निर्धारित किया जाएगा। कय आदेश केवल उपस्कर के मूल्य उसकी स्टैण्डर्ड वारण्टी एवं सम्बन्धित टैक्स (जीएसटी) के साथ ही जारी किया जाएगा एवं अन्य वांछित एक्सटैण्डेड वारण्टी +AMC/CMC (वार्षिक दर के आधार पर), को कय आदेश में फ्रीज (निर्धारित) कर दिया जाएगा जो कि Due Date से मांगकर्ता द्वारा पुष्टि करने पर लागू होंगी। 3% बैंक गारण्टी केवल उपस्कर का मूल्य उसकी स्टैण्डर्ड वारण्टी एवं सम्बन्धित टैक्स पर ही लागू होगी फाईल संख्या /The bidders may kindly note that they are required to furnish their price bid (Part-II) in two parts Price bid in BOQ format should include only the cost of equipment along with standard warranty and applicable taxes. Detailed price break-up indicating the cost of equipment along with standard warranty and applicable taxes+ extended warranty+ AMC/CMC (Annual basis) as desired in the NIT. It may be noted that the Price bid will be evaluated considering the above factors for arriving at LQ1 bidder. PO will be issued only for the cost of equipment along with standard warranty and applicable taxes. Whereas, the cost of extended warranty+ AMC/CMC (Annual basis) shall be freezed in the PO and will be applicable from the due date and will be confirmed by the user. Performance Bank Guarantee (3%) will be applicable only for the cost of equipment along with standard warranty and applicable taxes

16. इस निविदा हेतु मूल विनिर्माता अथवा उनके प्रतिनिधि एजेन्ट, दोनों में से कोइ एक हीं, एक मॉडल के लिए बोली जमा करेंगें । साथ हीं प्राधिकृत एजेन्ट एक साथ एक से अधिक विनिर्माताओं की बोलियाँ जमा नहीं करेंगें । कोई भी वैकल्पिक बोलि जमा नहीं करेंगें क्यों की ये हितों का टकराव होगा । ऐसी स्थिति में ऐसी सभी निविदाएँ निरस्त कर दी जाएगी /For this NIT, the only one bid will be accepted which may be submitted either by the OEM or his only one authorized bidder. Similarly, one authorized agent will be permitted to submit the bid of only one OEM. He cannot submit two bids for the two different OEMs. It may be noted that both OEM/their authorized agent are permitted to quote only one make and model and no alternates or optional make or models. Violations of this clause will lead into summarily rejection of all such bids, as it leads to conflict of interest.

17. बोलीदाताओं को चाहिए कि वे मूल्य बोली (प्राइस बीड- भाग-11) में अपनी दरें मांगे गए आधार पर प्राइस शेडुल प्रारूप पर भर कर दें। अगर मूल्य-निविदा (भाग-11) में कोई दर / प्रभार / टैक्स /लेवी का विकल्प खाली / छूटा/ शून्य / लागू नहीं है , आदि लिखा पाया गया तो उसे मूल्य में समाहित (*Inclusive*) माना जायेगा । जिसमे बोली जमा करने की अंतिम तिथि के बाद कोई सुधार मान्य नहीं होगा । सभी नियम और शर्तों के साथ मूल्य / दर विहीन (<u>un-priced</u>) वित्तीय बोली प्रारूप की एक प्रति तकनीकी-व्यवसायिक बोली के साथ लगाई जा सकती है । मूल्यांकन,न्यूनतम मूल्यांकित बोली आधार पर किया जाएगा जिसका उल्लेख मूल्य ई-निविदा में किया गया है / The Bidders are required to submit their Rates as directed in Price Bid, Part-II (Price Bid Schedule format). The rates are required to be quoted in BOQ format as well as in PDF. Please note that in case of any discrepancy between the two, the price bid quoted in PDF will be considered for evaluation and ranking. In Price Bid Schedule, if any rate/charge/ tax/ levies etc., will be found unfilled/ left blank/ zero/ NA etc., then same will be treated as Inclusive. No modification/ Alternation/ addition / correction etc. in bid will be acceptable after last date of bid submission. A copy of <u>un-priced</u> Price Bids/ schedule format with all terms & conditions can be submitted in technical bid also. Evaluation shall be made on the LQ-1, which has been stated in the Price Bid section of NIT.

18. निदेशक, सीएसआईआर-सीमैप को यह अधिकार है कि वह कोई कारण बताए बिना, किसी या सभी निविदाओं को अंशत: या पूर्णत: स्वीकार/अस्वीकार कर सकता है,या उसके/ उनके क्रम को भंग कर सकता है जो कि भाग लेने वाले सभी बोलीदातों को बाध्यकारी व स्वीकार्य होगा/ The Director, CSIR-CIMAP, reserves the right to accept/reject any or all tenders either in part or in full or to split the order without assigning any reasons there for which will be binding and acceptable all participating bidders.

ह०/ Sd/-भंडार एवं क्रय अधिकारी/ Stores & Purchase Officer

<u>NIT Document File No.-</u>CIMAP/PUR-651(1)/2024 For OPEN TENDER to be quoted in INR value only.

(Part-1: online techno-commercial bid&Part-II: Price online bid) (PART-I)

(Online Techno-commercial bid letter- be given on the bidder/firm's letter head)

Firm's ref: _____

Dated:_____

The Director CSIR-Central Institute of Medicinal & Aromatic Plants, P.O. CIMAP, Distt: Lucknow, Pin - 226015, U.P., India

File reference No:_____

Subject: Submission of Techno-commercial Online bid for_____.

Sir,

Having examined the online bidding documents and agreeing to the terms and conditions mentioned in the concerned NIT, we, the undersigned, hereby submit the **Techno-commercial Online bid** for supply of goods and services as per the schedule of requirements and in conformity with the said online bidding documents.

We hereby offer to supply the **technical details** related to the Goods/Services as sought by the purchaser in this NIT. We do hereby undertake that, in the event of acceptance of our online bid, the supply of Goods/Services shall be made as stipulated in the schedule to the Online bid document and that we shall perform all the incidental services.

In case of any **technical clarification or/ and demonstration** sought by the purchaser to arrive at the clear position, we will provide the same without altering our price online bid and without any monetary/ documentary liability on CSIR-CIMAP. For clarification purpose, we shall be submitting the historical documents i.e., those documents which exists before the floating of this tender. On demand by CSIR-CIMAP, we shall furnish the original document/ certificate submitted with this online quotation for the purpose of verification we understand that its mis-match can lead into rejection of our online bid at any level of the concerned procurement process. As, this is an Open Tender, thus, We have submitted our quote only in Indian Rupees along with the applicable GST of in our Price bid. Our Bid validity is for 180 days (One Hundred Eighty days), if asked we will agree to extend the same unconditionally. We are attaching all the requisite information in the prescribed formats as per Annexures of this NIT.

We enclose herewith the signed complete Techno-commercial Online bid along with the Technocommercial Online bid Letter in the prescribed e-tender format as per your requirement.

Bidder's authorized Signatory with Company Seal

Name: _____ Designation: _____ e-mail id and Mobile: _____ The offer must comprise of the following documents in the serial of Annexures as stated below in the Check list (submit the information in the prescribed format on firm's letter head)-

Check List- (Techno-commercial Online bid) Part-I A (Non-technical)

Information to be furnished on the firm's letter head and furnished in requisite formats is correct and updated-

| | (Yes/No) | | document is- |
|---|---|---|--|
| D^{1}_{1} | | | document is |
| Bidder's information form (Annexure-1) | | | |
| Manufacturer's authorization form (Annexure-2) | | | |
| Proof of Manufacturer's authorization | | | |
| Warranty Service Provider Agreement between the manufacturer and the Service Provider (if applicable) | | | |
| Online bid securing declaration/ EMD Declaration form (Annexure-3) | | | |
| No Blacklisting Certificate (Annexure-4) | | | |
| Acceptance of NIT terms & conditions/ Deviation form (Commercial) (Undertaking Annexure- 5) | | | |
| Lowest rate Certificate (Annexure- 6) | | | |
| Item Non Hosting on GEM (Annexure- 7) | | | |
| Undertaking Valid registration certificate in case the item(s) under procurement fall(s) under the restricted category of the current export-import policy of government of India (if applicable) (Annexure-8) | | | |
| Copy of the Last Audited Balance Sheet of the company (Annexure- 9) | | | |
| Income Tax Registration Certificate/GST Registration/ PAN No. and latest Income Tax Clearance Certificate (Annexure- 10) | | | |
| Local Content certificate (Format as Annexure- 11) | | | |
| Land Boarder Certificate (Format Annexure- 12) | | | |
| Undertaking for Agreeing for Compliance of the proper submission of prices in Price Bid Schedule with taxes/duties/levies (Annexure-13) | | | |
| Code of Integrity (Format as Annexure- 14) | | | |
| Apart from above, any other relevant document/ information. Annexure- 15 | | | |
| | Warranty Service Provider Agreement between the manufacturer and the Service Provider (if applicable) Online bid securing declaration/ EMD Declaration form (Annexure-3) No Blacklisting Certificate (Annexure-4) Acceptance of NIT terms & conditions/ Deviation form (Commercial) (Undertaking Annexure-5) Lowest rate Certificate (Annexure-6) Item Non Hosting on GEM (Annexure-7) Undertaking Valid registration certificate in case the item(s) under procurement fall(s) under the restricted category of the current export-import policy of government of India (if applicable) (Annexure-8) Copy of the Last Audited Balance Sheet of the company (Annexure-9) Income Tax Registration Certificate/GST Registration/ PAN No. and latest Income Tax Clearance Certificate (Annexure-10) Local Content certificate (Format Annexure-12) Undertaking for Agreeing for Compliance of the proper submission of prices in Price Bid Schedule with taxes/duties/levies (Annexure-13) Code of Integrity (Format as Annexure-14) Apart from above, any other relevant document/ information. | Warranty manufacturer and the Service Provider (if applicable)Online bid securing declaration/ EMD Declaration form (Annexure-3)No Blacklisting Certificate (Annexure-4)Acceptance of NIT terms (Commercial) (Undertaking Annexure- 5)Lowest rate Certificate (Annexure-6)Item Non Hosting on GEM (Annexure-7)Undertaking Valid registration certificate in case the item(s) under procurement fall(s) under the restricted category of the current export-import policy of government of India (if applicable) (Annexure-8)Copy of the Last Audited Balance Sheet of the company (Annexure-9)Income Tax Registration Certificate/GST Registration/ PAN No. and latest Income Tax Clearance Certificate (Annexure-10)Local Content certificate (Format as Annexure-11)Land Boarder Certificate (Format Annexure-12)Undertaking for Agreeing for Compliance of the proper submission of prices in Price Bid Schedule with taxes/duties/levies (Annexure-13)Code of Integrity (Format as Annexure-14)Apart from above, any other relevant document/ information. | Warranty Service Provider Agreement between the manufacturer and the Service Provider (if applicable) Online bid securing declaration/ EMD Declaration form (Annexure-3) No Blacklisting Certificate (Annexure-4) Acceptance of NIT terms & conditions/ Deviation form (Commercial) (Undertaking Annexure-5) Lowest rate Certificate (Annexure- 6) Item Non Hosting on GEM (Annexure- 7) Undertaking Valid registration certificate in case the item(s) under procurement fall(s) under the restricted category of the current export-import policy of government of India (if applicable) (Annexure-8) Copy of the Last Audited Balance Sheet of the company (Annexure-9) Income Tax Registration Certificate/GST Registration/ PAN No. and latest Income Tax Clearance Certificate (Annexure-10) Local Content certificate (Format as Annexure-11) Land Boarder Certificate (Format Annexure-12) Undertaking for Agreeing for Compliance of the proper submission of prices in Price Bid Schedule with taxes/duties/levies (Annexure-13) Code of Integrity (Format as Annexure-14) Apart from above, any other relevant document/ information. |

Check List- (Techno-commercial Online bid) Part-I B (Technical)

| S.N. | Document | Enclosed with | If yes, Page |
|-------|--|----------------|----------------|
| 5.IN. | Document | the online bid | No. in the bid |
| | | | document is- |
| | | (Yes/No) | document 1s- |
| 1. | Performance, past experience, order copies & service | | |
| | support detail form-in past three years. Details of | | |
| | Performance, past experience, order copies & service | | |
| | support detail form-in past three years in other CSIR | | |
| | Labs/ Institutions/ Govt. org./ Govt. research Laboratory/ | | |
| | Govt. University/ Autonomous body/ PSU/ Govt. | | |
| | Academics with contact details & addresses | | |
| | Annexure- 16 | | |
| 2. | Specifications and allied technical details, Annexure- 17 | | |
| 3. | Deviation form (technical), Annexure - 18 | | |
| | | | |
| 4. | Qualification requirements. Annexure- 19 | | |
| 5. | Qualification Requirements- | | |
| (a) | Documentary evidence establishing that the bidder is | | |
| (u) | eligible to online bid and is qualified to perform the | | |
| | contract if its online bid is accepted. Provide it at | | |
| | Annexure- 20 | | |
| | Annexue- 20 | | |
| (b) | Documents establishing goods eligibility and conformity | | |
| | to the online bidding documents. Provide it at Annexure- | | |
| | 20 | | |
| | | | |
| 8. | Firms under MSE, Make in India etc. willing for the | | |
| | relaxations in the NIT are required to submit their | | |
| | complete and updated documents issued by the | | |
| | Competent Authority. Any false declaration will lead into | | |
| | breach of procurement process/contract and deemed fit | | |
| | action will be taken by the Institute apart from being | | |
| | rejection of the bid. Provide it at Annexure- 21 | | |
| 9. | Apart from above, any other relevant document/ | | |
| | information. Annexure- Provide it at 22 | | |

Bidder's authorized Signatory with Company Seal

Name: _____ Designation: _____

Bidder Information Form

(Refer para 5.1.2 (ix)(a) of the CSIR Manual) (On the Letter Head of the Bidding firm)

(a) The Bidder shall fill in this Form in accordance with the instructions indicated below. No alterations to its format shall be permitted and no substitutions shall be accepted. This should be done of the letter head of the firm]

Date: [insert date (as day, month and year) of Bid Submission]

Tender No.: [insert number from Invitation for bids]

| 01. | Bidder's Legal Name [insert Bidder's legal name] |
|-----|---|
| 02. | In case of JV, legal name of each party: [insert legal name of each party in JV] |
| 03. | Bidder's actual or intended Country of Registration: [insert actual or intended Country of Registration] |
| 04. | Bidder's Year of Registration: [insert Bidder's year of registration] |
| 05. | Bidder's Legal Address and Registration in India: [insert Bidder's legal address and registration] |
| 06. | Bidder's Authorized Representative InformationName: [insert Authorized Representative's name]Address: [insert Authorized Representative's Address]Telephone/Fax numbers: [insert Authorized Representative's telephone/faxnumbers]Email Address: [insert Authorized Representative's email address] |
| 07. | Attached are copies of original documents of: [check the box(es) of the attached original documents] Articles of Incorporation or Registration of firm named in 1, above. |

Bidder's authorized Signatory with Company Seal

Name: _____ Designation: _____

MANUFACTURERS' AUTHORIZATION FORM

(Refer para 5.1.2 (ix)(b) of the CSIR Manual) (On the Letter Head of the Authorizing firm)

[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer and be enclosed with the technical bid.

Date: [insert date (as day, month and year) of Bid Submission]

Tender No.: [insert number from Invitation for Bids]

To: [insert complete name and address of Purchaser]

WHEREAS

We [insert complete name of Manufacturer], who are official manufacturers of [insert type of goods manufactured], having factories at [insert full address of Manufacturer's factories], do hereby authorize [insert complete name of Bidder] to submit a bid the purpose of which is to provide the following Goods, manufactured by us [insert name and or brief description of the Goods], and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with Clause 2.21 of the General Conditions of Contract, with respect to the Goods offered by the above firm for this NIT No_____ dated____ specifically. We have not authorized any other dealer to quote for this NIT.

Signed: [insert signature(s) of authorized representative(s) of the Manufacturer]

Name: [insert complete name(s) of authorized representative(s) of the Manufacturer]

Title: [insert title]

Duly authorized to sign this Authorization on behalf of: [insert complete name of Bidder]

Dated on ______ day of ______, ____ [insert date of signing]

Online Bid Securing Declaration/ Ernest Money Deposit (BSD/EMD) declaration form (Refer para 5.1.2 (ix)(d) & 6.1.1 (02) of the CSIR Manual) (On the Letter Head of the Bidding firm)

(Non-submission of BSD/EMD Declaration will result in summarily rejection of the bid)
Date:

Bid No. _____

To (insert complete name and address of the purchaser)

I/We. The undersigned, declare that:

I/We understand that, according to your conditions, bids must be supported by a Bid Securing Declaration.

I/We accept that I/We may be disqualified from bidding for any contract with you for a period of one year from the date of notification if I am /We are in a breach of any obligation under the bid conditions, because I/We

- (a) have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or
- (b) having been notified of the acceptance of our Bid by the purchaser during the period of bid validity
 (i) fail or reuse to execute the contract, if required, or (ii) fail or refuse to furnish the Performance Security, in accordance with the Instructions to Bidders.

I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the validity of my/our Bid.

Signed: (insert signature of person whose name and capacity are shown) in the capacity of (insert legal capacity of person signing the Bid Securing Declaration).

Name: (insert complete name of person signing he Bid Securing Declaration)

Duly authorized to sign the bid for an on behalf of : (insert complete name of Bidder)

Dated on _____ day of _____(insert date of signing)

Bidder's authorized Signatory with Company Seal

Name: ______ Designation:

(Note: In case of a Joint Venture, the Bid Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid)

No Holiday listing/ debarred / Blacklisting Certificate

(On the Letter Head of the Bidding firm)

I/We hereby certify that our firm______has/have not been declared Holiday listing/ debarred / Blacklisting by any other CSIR Labs or Institutes / Government or public sector or private organizations/ Enterprises/ Company/ Association / Institute/ Academy/ University etc,. In case it is found wrong/ incorrect/ false, then CSIR-CIMAP can also take deemed fit action against our firm and our bid may be rejected.

Date & Signature of authorized person For name of supplier / bidder Company seal

Deviation Statement form (Commercial)

(On the Letter Head of the Bidding firm)

I/We have gone through this NIT & all terms & conditions, which is/ are completely acceptable to me/us/ our firm or The following are the particulars commercial of deviations from the requirements of the NIT terms & conditions :

| e-tender conditions | Clause/Terms | & | Deviation | Remarks (including justification) |
|------------------------|--------------|---|-----------|-----------------------------------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Date: Bidder's authorized Signatory with Company Seal

Name: ______
Designation: _____

NOTE: Where there is no deviation, the statement should be returned duly signed with an endorsement indicating "No Deviations".

Lowest Rates quote certificate (On the Letter Head of the Bidding firm)

I/We hereby certify that the rate(s) / Price (s)/ charge (s) quoted by me for procurement ofin response of the tender ref No......is/ are the same and not higher than those quoted with other CSIR Labs/Inst, Government, public sector, or private organizations. In case it is found wrong/ incorrect/ false, then the excess amount may be recovered from firm's bill, if it is not possible the same will be paid by our firm. CSIR-CIMAP can also take deemed fit action against our firm.

Bidder's authorized Signatory with Company Seal

Name: _____ Designation: _____

Declaration on non-availability / Non Hosting of Item(s) on GeM (On the Letter Head of the Bidding firm)

Ref: Tender No.

Date _____

I/we here by checked and declare that the Item(s)..... quoted by M/s..... quoted by M/s..... (bidder name) for the procurement vide the tender ref No..... is/ are not uploaded on GeM Portal Of Govt. of India by Original Manufacturer/ Distributor/Dealer/Stockiest or any other supplier.

This is also confirmed that if the item will be uploaded/ sold on GeM, will be intimated to CSIR-CIMAP in advance. In case it is found wrong/ incorrect/ false, CSIR-CIMAP can also take deemed fit action against our firm.

Bidder's authorized Signatory Name: _____ Designation: _____

Undertaking for restricted / non restricted category (On the Letter Head of the Bidding firm)

Ref: Tender No.

Date _____

This is to certify that I/we here by Undertake and declare that the Item(s)......quoted by M/s......quoted by M/s...... (bidder name) for the procurement vide the tender ref No...... is/ are not under restricted category for sell /import / export under the any rules and regulation of National trade / International trade / restricted category of the current export-import policy of government of India.

or

It is under restricted category and undertake & declare that taken valid registration certificate (Copy enclosed) in case the item(s) under procurement fall(s) under the restricted category of the current exportimport policy of government of India (if applicable)

In case it is found wrong/ incorrect/ false, CSIR-CIMAP/ Govt. Authority can also take deemed fit action against our firm.

Bidder's authorized Signatory Name: _____

Designation: _____

(On the Letter Head of the Bidding firm)

We hereby attach the attested copy of the last Audited Balance Sheet of our firm M/s_____, which is participating in this NIT.

Bidder's authorized Signatory Name: _____ Designation: _____

(On the Letter Head of the Bidding firm)

We hereby attach attested documents of firm's GST/Income Tax Registration Certificate/PAN Card and latest Income tax clearance certificate.

Bidder's authorized Signatory Name: _____ Designation: _____

| Local Content Certificate (Not applicable for Foreign OEM | <mark>L)</mark> |
|--|---------------------|
| (On the Letter Head of the Bidding firm) | |
| No: | Date: |
| Sub:- Local Content Certificate | |
| Ref:- (i) Order. P-45021/2/2017 PP (BE-II) dated 04.06.2020 of DPIIT, Ministry of Comm | nerce and Industry, |

l Contont Contificate (Not applicable for Fousian OFM)

Govt. of India. (iii) Bid Ref No. (E-tender ID)...... Date...... Date.....

Sir.

This is to certify that the bidder M/s....as supplier is declaring here by the percent of local content in our quoted item as per CSIR-CIMAP NIT requirement as under:-

'Local content' means the amount of value added in India which shall be as, It has been prescribed by the Nodal Ministry/ has not been prescribed by the Nodal Ministry'* for our quoted item, be the total value of the items has to be procured as per this NIT (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.

I/ we M/s.....as 'Class-I local supplier/ Class-II local supplier/ Non- local suppler' ** hereby declare that our offered quoted items i.e.. CSIR-CIMAP NIT No.....date..... having local content 'equal to or more than 50% (or percent as prescribed by respective nodal ministry for Class-I local supplier)/ more than 20% but less than 50% (or percent as prescribed by respective nodal ministry for Class-II local supplier)/ less than 20% (or percent as prescribed by respective nodal ministry for Non- local supplier)' *** of the total value of the items to be procured as per aforesaid NIT & prescribed in Order. P-45021/2/2017 PP (BE-II) dated 04.06.2020 of DPIIT, Ministry of Commerce and Industry, Govt. of India.

Following are the details of the location(s) at which the local value addition is made-

1..... 2.....

I hereby undertake that the content of the certificate is true in all respect.

Bidder's authorized Signatory and Seal Name: Designation:

'*', '**' & '***' strike off which is not applicable.

Land Border Declaration Undertaking

(To be furnished on the Bidding Firm's Letter Head)

Ref No.

Dated:

Sub:- Land Border certificate
Ref: (i) Ministry of Finance, department of Expenditure, Public Procurement Division OM F.No.6/18/2019-PPD dated 23rde July 2020
(ii) CSIR-CIMAP NIT Ref. No.....Date.....

Procurement of

Certificate for the Land Border Declaration

"I have read the clause regarding restrictions on procurement from the bidder of a country which shares a land border with India.

*I certify that this Bidder is not from Land border country as stipulated in the aforesaid OM of Ministry of Finance a country, department of Expenditure, Public Procurement Division OM F.No.6/18/2019-PPD dated 23rde July 2020.

OR

**I hereby certify that this bidder is from land border country stipulated in the aforesaid OM of Ministry of Finance a country, department of Expenditure, Public Procurement Division OM F.No.6/18/2019-PPD dated 23rde July 2020 and fulfils all requirements in this regard and is eligible to be considered for this procurement The valid registration certificate issued by the Competent Authority is attached.

I hereby undertake that the content of the certificate is true in all respect.

Bidder's authorized Signatory Name: _____ Designation: _____

(Seal) */**strike off which is not applicable.

Undertaking for complying the proper submission of the Price Bid entries (To be furnished on the Bidding Firm's Letter Head)

Ref No.

Dated:

We, hereby, undertake that we have complied the Price entries as per the NIT requirement in given Price Bid Schedule.

Bidder's authorized Signatory Name: _____ Designation: _____

(Name & address of the Purchaser)

Sir,

With reference to your Tender No._____ dated _____ I/We hereby declare that we shall abide by the Code of Integrity for Public Procurement as mentioned under Para 1.3 of ITB of your Tender document, Refer para 3.2.1 & 5.1.2 (ix)(m),5.1.3 (02) (i) Conflict of Interest among Bidders/Agents of the CSIR Manual of procurement of goods 2019 & subsequent amendments and have no conflict of interest.

The details of any previous transgressions of the code of integrity with any entity in any country during the last three years or of being debarred by any other Procuring Entity are as under:

a b

c

We undertake that we shall be liable for any punitive action in case of transgression/ contravention of this code.

Thanking you,

Bidder's authorized Signatory and Seal Name: _____ Designation: _____

Bidder can use addition sheet to submit any other updated relevant document/information, if any

Performance, past experience, order copies & service support detail form-In Past Three Years

Name of the Firm.....

| Order placed by (Address /e- mail of the Purchaser) | Order No. and date | Description And quantity of the ordered equipment | Value of the order | Date of completion of the delivery as per contract | Date of actual completion of delivery | Remarks of late delivery if any | Has the equipment been installed satisfactory? (Documentary evidence) | Details of the Contact person (phone fax, email |
|---|-----------------------------|---|--------------------------|---|--|--|--|---|
| | | | | | | | | etc) |
| | | | | | | | | |

Please provide documents in support of the above entries.

Signature and Seal of the manufacturer/ bidder..... Place:

Date:

TECHNICAL SPECIFICATIONS OF 100 & 500 LITERS OF BIOFERMENTERS

100 L & 500 L Biofermenters with single control panel to fully automatic control of both (2 nos) biofermenters with all sensors, valves, pumps for 2 systems. The supply and assembly of the above units, complete installation, demonstration, and satisfy all the parameters as per the specification. The Biofermenters and their accessories are tested at the firm site before delivery to CSIR-CIMAP

1. 100 L Biofermenter

| | 4 | |
|---------|-----|--|
| General | 1. | Working Volume 75-80 L; Total Volume 100 L or more Minimum working volume: 20 L |
| | 2. | Designed for microbial cell culture for batch, fed batch and |
| | | continuous operation. |
| | 3. | All wet parts in contact with fermentation broth/reagents/feed, etc |
| | | should confirm to FDA guidelines. All elastomers used are to be of |
| | | food grade materials, quality tested and certified as per USFDA 21 CFR. |
| | 4. | Capable of rapid temperature shift in growth phase to allow heat induction. |
| | 5. | The equipment to be designed to comply with ASME Pressure Vessel Standards and ASME certified. |
| | 6. | Construction: The fermenter must be floor standing vessel on |
| | | skids made of SS304 tubes/square pipes. Control panel: SS304 for |
| | | transmitters and switch gear. Air, chilled water and steam lines to be |
| | | provided with pre-filter. |
| | 7. | Rupture disc and/or suitable safety device to be provided for vessel |
| | | and all utility lines (air, water and steam lines) |
| | 8. | 5 assignable peristaltic pumps with individual control unit and also, |
| | | capability to be connected to PLC/Microprocessor based control |
| | | system for acid, alkali, antifoam and nutrients. Also, provide 5 suitable |
| | | sterilizable containers for acid and alkali (for pH control), antifoam |
| | | (for foam control), nutrients (for feeding), and draining fermentation medium after completion along with support stand. |
| | 9. | All electrical and electronic parts should be splash protected. |
| | | Calibration certificates for all sensors to be provided. |
| | | The vessel should be designed for: |
| | | a. Automated Empty Vessel Sterilization |
| | | b. Automated Full Vessel Sterilization. |
| | | c. Independent sterilization of inlet filter, feed lines and vessel. |
| | | d. Manual air and oxygen gas measurement, sampling and harvesting |
| | 12. | Fermenter system to be CIP/SIP design and cGMP and validation |
| | | compliant. |
| | 13. | Feeding pumps to have capacity to deliver against pressure up to 1 |
| | | atmosphere. |
| | 14. | Mechanical documentation, flow charts and valve matrix, P&I |
| | | diagram, general arrangement drawing and layout drawing, |
| <u></u> | | |

| | Operation and maintenance manual of the whole system are to h |
|---------------|--|
| | Operation and maintenance manual of the whole system are to be supplied |
| | supplied. |
| | 15. The software provided must be cGMP and validation compliant |
| Vessel System | 1. The Vessel shall be designed with a working volume in the range |
| | 75 L to 80 L and total volume of 100 L and the lid to be provided |
| | with lifting handle (Hydraulic lift or equivalent) |
| | 2. 4 nos Baffles to be provided |
| | 3. Aspect ratio: 2.5: 1 to 3: 1 |
| | 4. The vessel is to be made of SS316L material and provided with |
| | a SS316 jacket for cooling. |
| | 5. The internal surface of the vessel to be electropolished to a R |
| | value of less than or equal to $0.8 \ \mu m$ and the outer surface should |
| | be finished and polished to an Ra value of less than or equal to |
| | 1.25 μm. |
| | 6. Vessel Pressure: Vessel working pressure 2.0 Kg/cm ² /ful |
| | vacuum, vessel design pressure 3.0 Kg/cm ² , jacket working |
| | pressure 3 Kg/cm ² and jacket design pressure 4.0 Kg/cm ²). |
| | 7. Temperature: Vessel and jacket design temperature (0 to 150 |
| | °C), and working temperature (5 to 140 °C) |
| | 8. 8 Ports for Exhaust, Light glass, Pressure Gauge, Pressure |
| | Sensor, Steam/ CIP, Safety Relief Valve, foam sensor, Leve |
| | sensor, acid addition, alkali addition, antifoam and feed addition |
| | sparger air inlet, Jacket inlet and outlet, inoculum transfer line |
| | temperature sensor, pH sensor, dissolved oxygen sensor |
| | sampling, agitator, spray ball, etc. |
| | 9. The equipment to be designed for- |
| | a. Automated Empty Vessel Sterilization, |
| | b. Automated Full Vessel Sterilization. |
| | c. Independent sterilization of inlet filter, feed lines and vessel. |
| | d. Manual air and oxygen gas measurement, sampling and |
| | harvesting |
| Piping | 1. The process piping should be made of SS 316L material and the utilit |
| | piping of SS 304/ 316/ 316L. |
| | |

| Agitation System | 1. | Drive: Top driven system with double mechanical seal/ magnetic drive. The seal assembly shall be of aseptic design, free of any crevices between the primary inner seal ring and shaft. |
|-----------------------|----|--|
| | 2. | Type of impeller: adjustable Rushton turbine impellers (3 nos.) to |
| | | provide good mixing and oxygen transfer for high cell density culture. |
| | 3. | Agitation rate: At least 50 to 1000 rpm and agitator shall be suitable for the range of specified operating and ambient conditions and for variable speed operation with control by an independent control loop having an accuracy of \pm 1% of full scale. Feedback control for agitation control VFD must be provided. |
| | 4. | Facility for easy removal of agitator and its components from the |
| | | vessel for maintenance and cleaning. |
| | 5. | Control: PID, feedback control of agitation rpm. |
| | 6. | Sensor: Photo-optical Encoder or Tachometer |
| | 7. | Indication: Digital |
| Aeration System | 1. | Provision for mixing at least two/three gases (air and oxygen/ nitrogen), necessary rotameters, valves, gas mix station to be included. |
| | 2. | 2 nos separate MFC (mass flow controller) for measurement and control of gas flow of oxygen and gas flow of air) for Dissolved Oxygen Control. |
| | 3. | Air supply capacity: |
| | 4. | For 100 L fermenter: Air: \geq 200 LPM, Oxygen \geq 100 LPM |
| | 5. | The air sparger and top airline in the vessel to be fitted to the air inlet line with a sterilizable-in-place air filter (with SS 316 L housing). |
| | 6. | A ring sparger to facilitate the even distribution of gases. |
| | 7. | Manual rotameter must be provided separately to both air and oxygen flow rate. |
| Dissolved Oxygen (DO) | 1. | Probe: In-situ sterilizable fast response Dissolved Oxygen sensor with cable |
| | 2. | Control: PID Cascade control function with any one and any combination of four parameters (stirrer speed, aeration rate, gas mix and substrate feed) simultaneously. Capable of controlling DO in a range of 0 - 100% saturation (within $\pm 2\%$ accuracy). |

| E-hourst S | 1 Drovido starilizable in place or filter (with CC 21C) beweiged and |
|----------------------------|--|
| Exhaust System | Provide sterilizable-in-place air filter (with SS 316 L housing) and exhaust condenser (for removal of moisture to protect exhaust filter from getting wet). |
| Pressure Control System | 1. The exhaust line should be fitted with a suitable valve for control or pressure in the vessel. |
| • | 2. An electronic pressure sensor cum transmitter should be fitted on the vessel lid to monitor vessel pressure. Accuracy of pressure sensor: 50 mbar |
| | 3. Provide an automatic pressure control system. |
| TemperatureControl | 1. The vessel should be designed for: |
| System for | a. Automated Empty Vessel Sterilization |
| sterilization and | b. Automated Full Vessel Sterilization. |
| cultivation | c. Independent sterilization of inlet filter, feed lines and |
| | vessel. |
| | 2. Sensor: RTD/Pt 100 |
| | Range: At least 10 °C above cooling water temperature up to 150 °C or, more with an accuracy of ± 1.0 °C. |
| | 4. Temperature to be controlled (PID control) by steam/ built in steam |
| | or hot water generator and cooling/chilled water. The exact |
| | temperature control mechanism, through use of valves, centrifuga |
| | pumps. |
| pH Control System | 1. Control: PID, within \pm 0.1 pH set points, with facility for dead band |
| | control by addition of acid and base. |
| | 2. Indication: Digital display. |
| | 3. Probe: Fermenter <i>In-situ</i> sterilizable pH probe with plug and cable. |
| Foam Control System | Foam sensor with cable to be provided on the vessel to activate the peristaltic pump fitted in the antifoam inlet line to add the required |
| | quantity of antifoam agent. |
| Feeding Pumps | 1. At least 05 peristaltic pumps should be provided along with the |
| | system. These pumps must be "assignable" and should be able to |
| | deliver against 1 atmospheric pressure. At least 2 of the pumps should |
| | be of variable speed. The pumps must be configurable using the |
| | control system provided. |
| | 2. One level sensor (other than foam sensor), for level measurement and |
| | control, is to be provided. |
| Sampling and | 1. Aseptic sampling system, steam supply valve and condensate trap for |
| Harvest System | sterilization of sampling assembly before/ after every sampling. |
| | 2. In case of harvest system different from sampling system, steam |
| | supply valve and condensate trap for sterilization of harvest assembly |
| | before and after harvest to be provided. |
| | 3. Additionally, 4 vessels/bottles: Suitable addition vessels made of glass |
| | (Schott-Duran), sterilizable and suitable aseptic operation for acid |
| | base, antifoam (2 L each) and feed (20 L) along with suitable tubing |
| | and connectors to be provided. These vessels must be reusable |
| | sterilizable and should be compatible for aseptic operation. The |
| | vessels should be provided with suitable connectors and membranes |
| | for attaching the same with the fermenter vessels. |

2. 500 L Biofermenter

| r | |
|---------|---|
| General | Working Volume 375 L to 400 L; Total Volume 500 L or more Minimum working volume: 100 L |
| | Designed for microbial cell culture for batch, fed batch and continuous operation. |
| | All wet parts in contact with fermentation broth/reagents/feed, etc should |
| | confirm to FDA guidelines. All elastomers used are to be of food grade |
| | materials, quality tested and certified as per USFDA 21 CFR. |
| | 4. Capable of rapid temperature shift in growth phase to allow heat induction. |
| | The equipment to be designed to comply with ASME Pressure Vessel Standards and ASME certified. |
| | 6. Construction: The fermenter must be floor standing vessel on skids |
| | made of SS304 tubes/square pipes. Control panel: SS304 for transmitters and switch gear. Air, chilled water and steam lines to be provided with pre- filter. |
| | Rupture disc and/or suitable safety device to be provided for vessel and al utility lines (air, water and steam lines) |
| | 8. 5 assignable peristaltic pumps with individual control unit and also, |
| | capability to be connected to PLC/Microprocessor based control system for acid, alkali, antifoam and nutrients. Also, provide 5 suitable containers for acid and alkali (for pH control), antifoam (for foam control), nutrients (for |
| | feeding), and post fermentation processing along with support stand.9. All electrical and electronic parts should be splash protected. |
| | 10. Calibration certificates for all sensors to be provided. |
| | 11. The vessel should be designed for: |
| | a. Automated Empty Vessel Sterilization |
| | b. Automated Full Vessel Sterilization. |
| | c. Independent sterilization of inlet filter, feed lines and vessel. |
| | d. Manual air and oxygen gas measurement, sampling and harvesting |
| | Fermenter system to be CIP/SIP design and cGMP and validation compliant. Feeding pumps to have capacity to deliver against pressure up to 1 |
| | atmosphere. |
| | 14. Mechanical documentation, flow charts and valve matrix, P&I diagram, |
| | general arrangement drawing and layout drawing, Operation and |
| | maintenance manual of the whole system are to be supplied. |
| | 15. The software provided must be cGMP and validation compliant |
| Vessel | 1. The Vessel shall be designed with a working volume in the range 375 |
| System | L to 400 L, and total volume of 500 L and the lid to be provided with |
| | lifting handle (Hydraulic lift or equivalent) |
| | 2. 4 nos Baffles to be provided |
| | 3. Aspect ratio: 2.5: 1 to 3: 1 |
| | 4. The vessel is to be made of SS316L material and provided with a SS316 |
| | jacket for cooling.5. The internal surface of the vessel to be electropolished to a Ra value of |
| | less than or equal to $0.8 \ \mu m$ and the outer surface should be finished |
| | and polished to an Ra value of less than or equal to 1.25 μ m. |
| | Vessel Pressure: Vessel working pressure 2.0 Kg/cm², vessel design |
| | pressure 3.0 Kg/cm ² , jacket working pressure 3 Kg/cm ² and jacket |
| | design pressure 4.0 Kg/cm ²). |
| | 7. Temperature: Vessel and jacket design temperature (0 to 150 °C), and |
| | working temperature (5 to 140 °C) |
| | 8. 8 Ports for Exhaust, Light glass, Pressure Gauge, Pressure Sensor, |
| | Steam/ CIP, Safety Relief Valve, foam sensor, Level sensor, acid |

| | addition, alkali addition, antifoam and feed addition, sparger air inlet, |
|-------------|---|
| | Jacket inlet and outlet, inoculum transfer line, temperature sensor, pH |
| | sensor, dissolved oxygen sensor, sampling, agitator, spray ball etc. |
| | 9. The equipment to be designed for- |
| | a. Automated Empty Vessel Sterilization, |
| | b. Automated Full Vessel Sterilization. |
| | c. Independent sterilization of inlet filter, feed lines and vessel. |
| | d. Manual air and oxygen gas measurement, sampling and harvesting |
| Piping | 1. The process piping should be made of SS 316L material and the utility piping of SS 304/ 316/ 316L. |
| Agitation | 1. Drive: Top driven system with double mechanical seal/ magnetic drive. The |
| System | seal assembly shall be of aseptic design, free of any crevices between the |
| System | primary inner seal ring and shaft. |
| | Type of impeller: adjustable Rushton turbine impellers (3 nos.) with 6 blades |
| | to provide good mixing and oxygen transfer for high cell density culture. |
| | 3. Agitation rate: At least 50 to 600 rpm and agitator shall be suitable for the |
| | range of specified operating and ambient conditions and for variable speed |
| | operation with control by an independent control loop having an accuracy |
| | of \pm 1% of full scale. Feedback control for agitation control VFD must be |
| | provided. |
| | 4. Facility for easy removal of agitator and its components from the vessel for |
| | maintenance and cleaning. |
| | 5. Control: PID, feedback control of agitation rpm. |
| | 6. Sensor: Photo-optical Encoder or Tachometer |
| | 7. Indication: Digital |
| Aeration | 1. Provision for mixing at least two/three gases (air and oxygen/ nitrogen), |
| System | necessary rotameters, valves, gas mix station to be included. |
| ~J~~~~~ | 2. Separate MFC (mass flow controller) for measurement and control of gas |
| | flow of oxygen and gas flow of air) for Dissolved Oxygen Control. |
| | 3. Air supply capacity: |
| | For 500 L fermenter: Air: \geq 1000 LPM, Oxygen \geq 300 LPM |
| | 4. The air sparger and top airline in the vessel to be fitted to the air inlet line |
| | with a sterilizable-in-place air filter (with SS 316 L housing). |
| | 5. A ring sparger to facilitate the even distribution of gases. |
| | 6. Manual rotameter must be provided separately to both air and oxygen flow |
| | rate. |
| Dissolved | 1. Probe: In-situ sterilizable fast response Dissolved Oxygen sensor with |
| Oxygen (DO) | cable |
| | 2. Control: PID Cascade control function with any one and any combination of |
| | four parameters (stirrer speed, aeration rate, gas mix and substrate feed) |
| | simultaneously. Capable of controlling DO in a range of 0 - 100% saturation |
| | (within $\pm 2\%$ accuracy). |
| | |
| L | 1 |

| | 4 - | |
|-------------------|---------|---|
| Exhaust System | | vide sterilizable-in-place air filter (with SS 316 L housing) and exhaust denser (for removal of moisture to protect exhaust filter from getting). |
| Pressure | 1. The | exhaust line should be fitted with a suitable valve for control of pressure |
| Control | | ne vessel. |
| System | 2. An e | electronic pressure sensor cum transmitter should be fitted on the vessel |
| 2,500 | | o monitor vessel pressure. Accuracy of pressure sensor: 50 mbar |
| | | vide an automatic pressure control system. |
| Temperature | | vessel should be designed for: |
| Control | a. | Automated Empty Vessel Sterilization |
| System for | b. | Automated Full Vessel Sterilization. |
| sterilization | с. | Independent sterilization of inlet filter, feed lines and vessel. |
| and | 2. Sens | sor: RTD/Pt 100 |
| cultivation | 3. Ran | ge: At least 10 °C above cooling water temperature up to 150 °C or, more |
| | with | an accuracy of \pm 1.0 °C. |
| | 4. Tem | perature to be controlled (PID control) by steam/ built in steam or hot |
| | wate | er generator and cooling/ chilled water. The exact temperature control |
| | mec | hanism, through use of valves, centrifugal pumps, heat exchangers. |
| pH Control | 1. Con | trol: PID, within \pm 0.1 pH set points, with facility for dead band, control |
| System | by a | ddition of acid and base. |
| | 2. Indi | cation: Digital display. |
| | 3. Prob | pe: Fermenter in-situ sterilizable pH probe with plug and cable. |
| Foam | | m sensor with cable to be provided on the vessel to activate the |
| Control | | staltic pump fitted in the antifoam inlet line to add the required quantity |
| System | | ntifoam agent. |
| Feeding | | east 05 peristaltic pumps should be provided along with the system. |
| Pumps | | se pumps must be "assignable" and should be able to deliver against 1 |
| | | ospheric pressure. At least 2 of the pumps should be of variable speed. |
| | | pumps must be configurable using the control system provided. |
| | | level sensor (other than foam sensor), for level measurement and |
| a v | | trol, is to be provided. |
| Sampling | | otic sampling system, steam supply valve and condensate trap for |
| and Harvest | | ilization of sampling assembly before/ after every sampling. |
| System | | ase of harvest system different from sampling system, steam supply valve |
| | | condensate trap for sterilization of harvest assembly before and after vest to be provided. |
| | | ition vessels/bottles: 6 Suitable addition glass vessels (Schott-Duran |
| | | e), sterilizable and suitable aseptic operation for acid, base, antifoam (5 |
| | | nd feed (20 L x 3 nos) along with suitable tubing and connectors to be |
| | | vided. These vessels must be reusable, sterilizable and should be |
| | • | patible for aseptic operation. The vessels should be provided with |
| | | able connectors and membranes for attaching the same with the |
| | | nenter vessels |
| Control | | the fermenters should be connected aseptically suitable connections |
| System Design | | t be provided to connect the both the fermenters aseptically. |
| | | Control Platform for the equipment shall be an industry standard |
| | | oprocessor based/ PLC control system, with operating panel for viewing |
| | set | points, process parameters, necessary trends etc. Visual and audible |
| | alar | ms for deviations from set parameters; Interlocks to ensure safety and |
| | | ent equipment damage. Provision for battery pack with the controller to |
| | prev | vent loss of set points in case of power failure. |
| | | |

3. Control tower common for both fermenters

The control panel is a centralized unit that manages and monitors fermenters. The control panel will feature advanced automation and control capabilities, ensuring efficient and consistent operation.

| Display size | 15" | |
|---------------------------|---|--|
| Display type | Touchscreen, colour display | |
| Resolution | High resolution for clear and detailed display of process parameters and | |
| | control screens | |
| User Interface | Intuitive and user-friendly interface for ease of operation | |
| PLC-Based system | Control operation | |
| Variable Frequency | Control cabinet housing VFDs for all fermenters to manage agitation | |
| Drives (VFDs) | speed and other motor-driven operations | |
| Operator Interface | Centralized terminal for operator interaction with the system | |
| Terminal | | |
| Control functions | PID control Temperature; Agitation speed; DO; pH; Back pressure; | |
| | Level monitoring, optical density/turbidity measurement, foam level, | |
| | liquid/feed addition, pumps for addition of acid, base, antifoam, feed, | |
| | pO_2 in a programmable manner so that microbial growth/fermentation | |
| | can be carried out | |
| Real-Time | Real-time data acquisition and display process parameters | |
| Monitoring | | |
| Alarm management | Visual and audible alarms for deviations from set parameters; Interlocks | |
| | to ensure safety and prevent equipment damage | |
| Data Logging | Continuous logging of process parameters for historical analysis and | |
| | quality control | |
| Recipe | Centralized management of pre-defined recipes for vessel sterilization, | |
| Management | fermentation control, etc | |
| Reporting | Generation of reports for process validation and compliance | |
| Hardware and | Windows based Supervisory Control and Data Acquisition (SCADA) | |
| software for data | software for monitoring and control of various parameters with security | |
| logging and | features. The software must be cGMP and validation compliant. The | |
| fermentation | software must have capability for remote log in through LAN for real | |
| | time data login and process control. Must have facilities for process | |
| process control | validation, batch management features, multi-parameter display, time | |
| | based programming of set points, regulation of process by both | |
| | measured and calculated variable and its integration for control of | |
| | fermenter parameters, ability to set both high and low limits and alarms, | |
| | graphic/plotting, off-line data integration (data sheet may be compatible | |
| | with MS Excel etc.) and batch reports. It should have facilities for | |
| | manual override of all values, set points and process parameters during | |
| | the process. The quote must include both software and hardware. | |
| Power supply | Redundant power supply for uninterrupted operations | |
| Main and | Safety and management handling | |
| Emergency Power | | |
| Shut-Off Switches | | |
| Screen/ visual | Display size 45" (optional) | |
| system for display | | |

4. Chiller

| Equipment type | Skid mounted water-cooled chiller | |
|---|--|--|
| Tank size | 500 L | |
| Cooling water | | |
| temperature | | |
| Maximum ambient | 55 °C | |
| temperature | | |
| Maximum relative | 100% | |
| humidity | | |
| Compressor model | Reciprocating; Emerson Copeland | |
| Refrigerant capacity | 2.5 TR | |
| Water flow rate | 2500 LPH | |
| Water outlet | 17 °C | |
| temperature | | |
| Refrigerant gas | R-22 | |
| Input power | ▲ | |
| (Compressor Oil free) | | |
| Power efficiency | 1.16 KW/TR | |
| Control supply | AC Single phase 230 V | |
| Noise level | Less than 70 dB at 1-meter distance/unit | |
| Water flow rate | 2500 LPM | |
| Condenser | Finned Copper tube type; Axial Fan | |
| Evaporator | Coil in tank type | |
| Expansion valves | Expansion valves for minimum superheat for evaporator | |
| Gas piping | Interconnecting refrigerant piping of Copper; Structural stand for | |
| | compressor, condenser, liquid receiver, chiller | |
| Control panel | Electro-Mechanical with fault indications | |
| Safety Interlocks LP switch & gauge; HP switch & gauge; Compressor over | | |
| | Digital temperature controller | |

5. Boiler

The boiler is supported fermenters, various equipment's and associated utilities

| Equipment type | Electrical steam generator | |
|---|---|--|
| Steam generation | 80 kg/h | |
| capacity | | |
| Heater power | 36 KW | |
| Pump power | 1 HP | |
| Auto feed | Automatic water feed system to maintain the water level in the boiler | |
| Water overflow Cutoff | Safety feature to prevent water overflow | |
| Auto High pressure Automatic cutoff to prevent pressure from exceeding safe l | | |
| Cutoff | | |
| Vessel Vessel body should be SS304 | | |
| Body material of | dy material of MS with power coating for corrosion resistance | |
| construction | | |
| Insulation | Insulated with glass wool to minimize heat loss and improve energy | |
| | efficacy | |
| Piping and | Inlet connection (1/2" diameter); Outlet connection (1/2" diameter); | |
| Connections | Connections Drain connection (1/2" diameter) | |
| Control panel | Includes necessary controls for operation, safety interlocks, and | |
| | indicators for system monitoring | |

6. Compressor with Dryer (oil free compressor)

The Compressor is supported fermenters, various equipment's and associated utilities

| Equipment type | Air compressor with Dryer | |
|----------------------------|--|--|
| Pressure | 10 Bar | |
| Motor power | 60 HP | |
| Capacity | 17 CFM @10 Bar | |
| Air Connection | 2" | |
| Safety features | Overload protection; Emergency stop button; Pressure relief valve | |
| Dryer | Integrated dryer to ensure the supply of dry, moisture-free air to the | |
| | fermenter | |
| Outlet 3-stage filter | Stage 1 – Coalescing fitter to remove oil and water aerosols; Stage 2 | |
| _ | - Particulate filter to remove fine particles; Stage 3 - Activated | |
| | carbon filter to remove oil vapors and odors | |
| Structure | Robust structural stand for mounting the compressor, dryer, and | |
| | filters | |
| Piping | Interconnecting piping of Copper. Proper insulation and support to | |
| | ensure minimal vibration and noise | |
| Control panel | Electro-mechanical control panel with fault indications. Includes | |
| | start/stop buttons, pressure gauges, and status indicators. Ensure | |
| | reliable starting of the compressor motor. Reduces vibration and noise | |
| | transmission, ensuring smooth operation. For easy maintenance and | |
| | efficient separation of oil from the compressed air | |
| LP switch & gauge | Low-pressure switch and gauge for monitoring | |
| HP switch & gauge | High-pressure switch and gauge for monitoring | |
| Compressor overload | Protection against motor overload | |
| trip | | |
| Digital temperature | For precise temperature control of the dryer | |
| controller | | |

7. RO plant

| Capacity | 100 LPH | |
|-------------------------------------|---|--|
| Quality of treated | pH (6.5-7.3), Conductivity (mic/cm ²) <1, Residual dissolved solids 1 | |
| water ppm (max.), Silica (0.05 ppm) | | |
| Multi-grades and | - | |
| Filtration Unit | | |
| Activated Carbon | - | |
| Filter | | |
| Antiscalent Dosing | One electronic metering pump complete with suction delivery valves | |
| System | and required flexible high pressure tubing capacity 5 L/hr, Back | |
| | Pressure 4 bars, Make FTPS/E-Dose, One HDPE 10 L capacity | |
| | chemical tank | |
| Micron Filtration | One-micron filter housing length 40", inlet/outlet connection 3/4" | |
| | with air release valve, One 5 micron rating polypropylene cartridge | |
| | size 20" long | |
| Reverse Osmosis | - | |
| system | | |
| RO water storage tank | Capacity 2000 L | |
| RO Cleaning / | - | |
| Flushing systems | | |

| Mixed Bed Feed Pump | SS |
|----------------------|--|
| Mixed Bed Unit | - |
| Detail specification | Compact skid, Front table for control instruments, Pre-filter made of polypropylene, Glycerol filled pressure gauges, High pressure pump made of stainless steel, RO pressure vessel made of glass fiber/SS, RO membrane (Hydranautics/Oltramere), Ball valves, Rota meters, PUVC fittings, Control panel, Online TDS meter along with TDS sensor |

8. Utilities Pipeline

The supply, installation, commissioning, and demonstration of the interconnection of pipelines from the utilities (boiler, chiller, and compressor) to the fermentation plant. The scope included the insulation of pipelines for all utilities to ensure efficiency and safety.

| Scope of work | Interconnection of pipelines from the utilities (boiler, chiller, and compressor) to the plant; Insulation of pipelines for all utilities to ensure minimal heat loss and safety; All piping work should comply with relevant standards and best practices |
|-----------------------|--|
| Material construction | Utility piping – SS304 for all utility lines; Insulation material – High quality insulation material suitable for the specific utility |
| Pipeline installation | Proper routing to ensure minimal pressure drop and ease of maintenance. Use tri-clamp or sanitary connections where applicable for easy assembly and disassembly. All pipelines should be supported and anchored properly to prevent sagging and vibration. Pressure regulator valve connected to pipeline (air/water) for monitoring the pressure. The pine lines are connected to suitable filters and P.R.V (pressure release valve). |
| Insulation | Insulation thickness should be suitable for the operating temperature of the utility. All insulated pipelines should have a protective cladding to prevent damage to the insulation material. Insulation should be continuous and seamless to prevent heat loss or gain. All joints and seams should be properly sealed to ensure the integrity of the insulation. |

9. Computer with printer

| Suitable branded latest computer system | 16 GB RAM or higher, 1 TB SSD, RWDVD Drive with licensed and genuine operating system (latest and compatible window) having 24 inch (approx.) monitor of latest technology | |
|---|--|--|
| Processor | i7 processor | |
| Software | Updated original MS office software & PDF reader and writer for report commissioning | |
| Accessories | Branded multi-function (PSC) duplex laser printer of standard quality | |

10. Warranty

The system should be supplied with minimum five-years on-site warranty (1-year standard + 4 years extended warranty) from the date of installation with local service support). Additionally, to mention the AMC break-up from 6^{th} to 10^{th} Year.

11. Experience of the firm for this job

At least 5 years of fermentation experience, and 3 years of pilot-scale fermentation experience on installation, and commissioning in the volume of 500 L capacity or more in Govt Sector, Public sector, University, or reputed industries. At least provide one order copy of value equal to or more than the indenting value. Supplier must submit satisfactory performance certificates from at least 5 users (In last 5 years only) with user name, mobile number, and email id for cross verification, which operating the biofermenter of capacity 500 L or more in the institute like Govt Sector, Public sector, University, or reputed industries to the effect that they satisfied the working of the equipment and service provided by the supplier.

12. Skill man power support for running the bioreactors

The firm should provide suitable man-power for round the clock operation of the overall operation and maintenance. The man-power also provide on the spot training to the user scientists and research scholars. The period of contract initially for a year. The service may be extended as per the requirement (quote in separate budget break-up).

13. Delivery period and successful installation

The delivery of all components, the installation at CSIR-CIMAP premises, and complete functional demonstration will be completed within 20 weeks after receiving the PO.

14. Training of users and after installation service

At least provide training minimum 10 students/ faculties at the installation site for a week with complete demonstration of main equipment's performance, and operating procedures including its accessories. If any break down in the equipment or its accessories to attain the call within 48 hours.

15. Necessary requirement

A complete installation and demonstration of functionality of bioreactors should be done at the user site including all tubing and accessories. The firm should submit 10% PBG.

16. Media disposal

The spent media disposal after work-up or and spoil media disposal solution (quote in separate budget break-up)

17. Preferred makes (INSTRUMENTS & COMPONENTSPECIFICATIONS)

(i) Valves & Housings

| Manual Diaphragm Valve | MOC: SS316L, | Burkert/ Gemu/ Swagelok |
|-----------------------------------|--|-------------------------|
| | Steam Sterilizable 8 mm to 100 mm forged | |
| | body | |
| Pneumatic Diaphragm Control Valve | MOC: SS316L, | Burkert/ Gemu/ Swagelok |
| | Steam Sterilizable 8 mm to 100 mm | |

| Automatic Flush Bottom Valve with | MOC: SS316L, | Burkert/ Gemu/ Swagelok |
|-----------------------------------|-------------------------------------|-------------------------------|
| SIP | Steam Sterilizable | |
| Sampling Valve with SIP | MOC: SS316L, | Burkert/ Gemu/ Swagelok |
| | Steam Sterilizable | |
| Aseptics 3 -way Double Block and | MOC: SS316L, | Burkert/ Gemu/ Swagelok |
| Bread | Steam Sterilizable | |
| Pneumatic Control Valve | MOC: SS316L, | Burkert/ Gemu/ Swagelok |
| | Steam Sterilizable 15 mm to 100 mm | |
| Angle Seat Valve | MOC: SS316L, | Burkert/ Gemu/ Swagelok |
| | Steam Sterilizable 100 mm to 300 mm | |
| Back Pressure Control Valve | - | Burkert/ Gemu/ Swagelok |
| Flush Bottom Valve | - | Burkert/ Gemu/ Swagelok |
| Flap Check valve | MOC: \$\$304 | Alfa Laval/ Forbs Marshall/ |
| | | Gemu |
| Steam Trap valve | MOC: \$\$304 | Alfa Laval/ Forbs Marshall |
| | | Gemu |
| Aseptics Clean Trap Valve | MOC: SS316L | Alfa Laval/ Forbs Marshall/ |
| | | Gemu |
| Aseptics NRV | - | Alfa Laval/ Forbs Marshall/ |
| | | Gemu |
| Ball Valves | MOC: SS316L | Alfa Laval/Cipriani Harrison/ |
| | | Forbs Marshall |
| Safety Valve | Aseptic Connection | Sweaglok/ Ciprian |
| | | Harrison/ Forbs Marshall |
| Jacket Safety Valve | Screwed Union end Connections | Sweaglok/ Ciprian |
| | | Harrison/ Forbs Marshall |
| Spray Ball | Removable Spray Ball | Alfa Laval/ Lechler, |
| | | Sweaglok |
| Pressure transmitter | Sanitary End Connections | Baumer/Tescom/Huba |
| | | Control |
| pH/DO Housing | MOC: SS316L | Mettler-Toledo/ Andersor |
| | | Negele |

(ii) Instrumentation

| pH Sensor & Transmitter | Gel Filled, Sterilizable probe, 25 mm port, MOC: | Mettler-Toledo/ Anderson |
|----------------------------------|--|---------------------------|
| | SS316L end connection | Negele |
| DO Sensor & Transmitter | | Mettler-Toledo/ Anderson |
| | | Negele |
| Temperature Sensor & Transmitter | Sanitary End Connection | Radix/ Dwyer |
| Turbidity | Single Channel NIR Absorption | - |
| , | Probe, 0-6 AU, 0.01 AU | |
| Pressure Gauge for Vessel | Diaphragm type, glycerin filled, TC end | Baumer/Tescom/Huba |
| | connection, MOC: SS316L | Control |
| Pressure Gauge for Jacket/Limpet | Bourdon type, threaded end connection | Baumer/Tescom/Huba |
| | MOC: \$\$304 | Control |
| Anti-Foam Sensor | Conductivity Based | Anderson Negele/ Mettler- |
| | | Toledo |
| Differential Flow Transmitter | - | E+H/ Emerson/ Burkert |
| Air Flow Controller | Mass Flow (Vortex Type) | E+H/ Emerson/Burkert |
| Peristaltic Pump | - | Watson marlow/ |
| | | Bühler |
| | | Technologies |
| | | GmbH |

| DPT | (Differential | Pressure | - | E+H/ Emerson/Burkert |
|--------|---------------|----------|---|----------------------|
| Transm | itter) | | | |

(iii) Filters

| Inlet Air Filter | 0.2µ, In-situ Sterilizable | Sartorious/ Pall/ Cytiva |
|--------------------|--|--------------------------|
| Exhaust Air Filter | 0.2µ, In-situ Sterilizable | Sartorious/ Pall/ Cytiva |
| Filter Housing | MOC: SS316L, Electro polished | Sartorious/ Pall/ Cytiva |
| | 0.5µ interior, passivity 0.8µ exterior surface | |

(iii) Others

| Rotameter | Acrylic body SS316L threaded end connections | Flowtech/Flowstar/Dwyer | |
|------------------------------|--|--|--|
| Circulation pump | MOC: SS304 | Willo/Grundfos | |
| Condenser | Tube Type | SB/Admiralty industries | |
| Peristaltic Pump | Acid/Base/Antifoam/Nutrients | Watson marlow/ Bühler Technologies GmbH | |
| Motor Drive/ Servo drive | Variable frequency drive | SIEMENS/DELTA | |
| Magnetic Flow Meter | Liquid Flow Controller | E+H/ Emerson/ Burkert | |
| PLC/SCADA | - | SIEMENS/Saunders | |
| HMI (ICP) | TOC 1551T-E3AE, 19" | SIEMENS/ Exor/ | |
| | | Unitronics | |
| Pipeline | - | CSE/Kinglai/Rensa | |
| Power supply | - | Lubi/Advanced | |
| | | Conversion Technology | |
| VFD | - | ABB/Siemens | |
| Rupture Disc | - | Fike | |
| Mechanical seal | - | Rolon | |
| Gear Box | - | Bonfiglilio | |
| Illumination Lamp | 3 WattLED, SS304casing,ON/OFF switch | Phillips/Lubi | |
| Electrical/ Instrument panel | MOC: SS304 | Mattfinish splash proof | |
| Control panel | - Eldon/Rittal | | |
| Pneumatic Accessories | - | SMC/Janatics | |
| Stirrer | - | Rushton Blade Impellor | |
| | | Flange Mounted Motor | |
| | | (6 blade disk impeller 3) | |

Each set will come under warranty period after its successful installation and commissioning. However, the validity of standard warranty of each set will be extended up to one year from the date of successful installation, commissioning and final acceptance by the user at the fourth site.

Vendor should carefully fill up the rates in price bid for the main equipment with accessories including standard warranty, year wise price break-ups of extended warranty and year wise price break-ups of AMC/CMC charges (in case, specifically asked in the NIT) and the same should be confirmed without quoting price in the techno-commercial bid. Non-compliance of this may lead to summarily rejection of the Bid.

(B) Delivery Schedule (IO/PL to fill it carefully)

| Schedule | Period | | Reference |
|-----------------------|------------------|------------|--|
| | Purchaser's | Supplier's | |
| | requirement | response | |
| Expected delivery | | | From the date of issue of the Purchase Order |
| period | | | in the respective sites of CSIR-CIMAP |
| Expected installation | | | |
| & commissioning | | | CSIR-CIMAP Kukrail Picnic Spot Road, |
| period | With in 142 Days | | Post Office CIMAP Lucknow-226015 |
| Expected Period of | With In 142 Days | | |
| Demonstration, | | | |
| observation and | | | |
| training | | | |

C. Allied Technical Details-

| S.N. | Allied technical details | bidder's response | |
|------|--|-----------------------------------|--|
| 1. | Product catalogues/ user manual/ other informative material/ | Enclosed (Yes/No) (Ensure that it | |
| | sketches/ drawings etc. | should be up to date and page | |
| | | numbered) | |
| 2. | Country of origin (INDIA) | | |
| 3. | Place of dispatch of onsignment | | |
| 4. | Banker's details | | |
| 5. | Free Warranty/Guarantee for a period of | | |
| 6. | Extended Warranty/Guarantee for a period of | | |
| 7. | Installation, commissioning & training, | | |
| 8. | Details of service provider for after sales/complaints etc. | | |
| 9. | AMC including Visits & breakdown visits as stipulated in NIT | | |
| 10. | Comprehensive AMC/CMC including Visits & breakdown visits | | |
| | and spares (If asked in the NIT) | | |
| 11. | Details of accessories (if any) | | |
| 12. | List of non-consumables (if any) | | |
| 13. | List of consumables (if any) | | |
| 14. | Any other relevant detail | | |

Annexure- 18

DEVIATION STATEMENT FORM (Techno-commercial/Part-1 Bid)

1) The following are the particulars of deviations from the requirements of the e-tender specifications:

| e-tender Clause/specifications | Deviation | Remarks (including justification) |
|--------------------------------|-----------|-----------------------------------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Place:

Date:

Signature and seal of the Manufacturer/ bidder

NOTE:

Where there is no deviation, the statement should be returned duly signed with an endorsement indicating "No Deviations"

Qualification requirements (Pre-Qualification/Eligibility Criteria)

(a) Techno-commercial Capability: The bidder shall attach **documentary evidences** that it meets the following financial requirement(s):

- i. Copy of the Last Audited Balance Sheet of the company
- ii. Income Tax Registration Certificate/PAN No. and latest Income Tax Clearance Certificate
- iii. Proof of Manufacturer's authorization
- iv. Photocopy of Warranty Service Provider Agreement between the manufacturer and the Service Provider.
- v. Details of Local service centers (Nearest place to the Purchaser)
- vi. Photocopy duly attested of Certificate of compulsory enlistment of Indian Agents of foreign principals with DGS&D if quoting on their behalf. Date of enlistment must be before the date of opening of e-tenders?

(b) Experience and Technical Capacity: The bidder shall attach the documentary **evidences** to demonstrate that it meets the following experience requirement(s):

- i. Performance statement in enclosed format: Past experience towards supply of **similar** Scientific equipment in other CSIR Labs/ Institutions/ Govt. org./ Govt. research Laboratory/ Govt. University/ Autonomous body/ PSU / Govt. Academics with contact detail & address.
- ii. Client list with contact detail, responsive phone No., e-mail & address
- iii. Product rage of similar Scientific Equipment/ Plant for research and development process.
- iv. Copies of relevant work orders
- v. Details of supplies of identical or similar equipment made to other CSIR labs/ Institutions for the preceding three years together with price eventually or finally paid.
- (c) **Usage Requirement:** (By the Purchaser)- The bidder shall attach documentary evidence to demonstrate that the GOODS it offers, meets the usage requirement.

(d)The bidder should be an Indian manufacturer/authorized representative of a manufacturer who must have designed, manufactured, tested and supplied the equipment(s) similar to the type specified in the "Technical Specification". The MAF must be enclosed with the technical online bid. Such equipment's must be of the most recent series/models incorporating the latest improvements in design. The models should be in successful operation for at least one year as on date of Online bid Opening.

Signature and Seal of the manufacturer/ bidder..... Place : Date :

PART-II

Financial Online bid Forms

(On the Letter Head of the firm submitting the Online bid Document) (to be submitted in a separate envelope mentioning the details on it)

List of standard forms-

- (1) Financial Online bid Letter
- (2) Price Schedule-
 - (i) For abroad items
 - (ii) For indigenous items
- (2) Statement for deviations from financial terms and conditions.

1. Financial Online bid Letter

The Director Central Institute of Medicinal and Aromatic Plants P.O.CIMAP, DISTT: Lucknow PIN - 226016, Uttar Pradesh, INDIA

> e-tender Reference No: File reference No:

Subject: Price Online bid for_____.

Sir,

Having examined the online bidding documents and having submitted the technical online bid for the same, we, the undersigned, hereby submit the Financial Online bid for supply of goods and services as per the schedule of requirements and in conformity with the said online bidding documents.

We hereby offer to supply the Goods/Services at the prices and rates mentioned in the Financial Online bid. We shall be submitting the quote of NIT item(s), if any, in Indian Rupees in our Price bid.

We do hereby undertake that, in the event of acceptance of our online bid, the supply of Goods/Services shall be made as stipulated in the schedule to the Online bid document and that we shall perform all the incidental services.

The prices quoted are inclusive of all charges including installation and commissioning charges in the Central Institute of Medicinal and Aromatic Plants Lucknow or its units.

We enclose herewith the complete Financial Online bid in the prescribed e-tender format as per your requirement. This includes:

- (1) Price Schedule- (Enclose whichever is applicable)
- (i) Price Schedule for Goods being offered from ABROAD
- (ii) Price Schedule for Goods being offered within INDIA
- (2) Statement for deviations from financial terms and conditions.

We agree to a online bide by our offer for a period of One Hundred Eighty (180) days from the date fixed for opening of the online bid documents and that we shall remain bound by a communication of acceptance within that time. We have carefully read and understood the terms and condition of the online bid document and we do hereby undertake to supply as per these terms and conditions. The Financial Deviation are only those mentioned in the statement of deviation from financial terms and conditions.

We do hereby undertake, that until a formal work order is prepared and executed, this online bid, together with your written acceptance thereof and placement of letter of intent awarding the work order, shall constitute a binding contract between us.

1. bidder's Legal Name [insert bidder's legal name]

2. In case of JV, legal name of each party: [insert legal name of each party in JV]

3. bidder's actual or intended Country of Registration: [insert actual or intended Country of Registration] Country

4. bidder's Year of Registration: [insert bidder's year of registration]

5. bidder's Legal Address in Country of Registration: [insert bidder's legal address in country of registration]

All corrections/deletions should invariably be duly attested by the person authorized to sign the online bid document).

Dated this day of_____ Signature of bidder

Details of enclosures

Full Address: Telephone No. Telegraphic Address: E-mail:

COMPANY SEAL

2. Price Schedule Form

PRICE SCHEDULE FOR GOODS BEING OFFERED WITHIN INDIA

| Name of the bidder | |
|--------------------|--|
| NIT Reference No | |
| File Reference No | |

| Sl. No. | Description/ Part | Quantity | Unit Price (in | Total Amount (in | |
|--|---|-------------------------|----------------|------------------|--|
| | No./ Make Mode* | | INR) | INR) | |
| 1. | | | | | |
| 2. | | | | | |
| 3 | | | | | |
| Ex-Works Price- | | | | | |
| Packing & forward | ing | | | | |
| FOR (CIMAP Stor | es) | | | | |
| Full GST/Full IGST | (their rate(s)as the cas | se may be, clearly spec | cified) | | |
| Transportation | | | | | |
| Insurance up to Des | stination /handover (in | case of fabrication) | | | |
| Installation & Com | missioning charges | | | | |
| Training charges | | | | | |
| Additional Warrant | ty Charges | | | | |
| Annual Maintenanc | e Charges | | | | |
| Additional Warrant | ty Charges 2 nd year + F | ull GST | | | |
| Additional Warranty Charges 3rd year +Full GST | | | | | |
| Additional Warranty Charges 4th year +Full GST | | | | | |
| Additional Warranty Charges 5 th year +Full GST | | | | | |
| Comprehensive /An | Comprehensive /Annual Maintenance (CMC/AMC) Charges 6 th Year) +Full GST | | | | |
| Comprehensive Ani | Comprehensive Annual Maintenance (CMC/AMC) Charges 7 th Year) + Ful l GST | | | | |
| Comprehensive Annual Maintenance (CMC/AMC) Charges 8 ^h Year) +Full GST | | | | | |
| Comprehensive Annual Maintenance (CMC/AMC) Charges 9th Year) +Full GST | | | | | |
| Comprehensive Annual Maintenance (CMC/AMC) Charges 10 th Year) +Full GST | | | | | |
| Note: CSIR-CIMAP has currently no exemption / concession for IGST/GST. If it will be not quoted/ left | | | | | |
| blank/ NIL, then it will be treated as inclusive and can't be claimed/altered after expiry of Last date of | | | | | |
| submission of Bid. Additional warranty /CMC/AMC charges will be included in evaluation and it will be | | | | | |
| | freezed in Purchase order. Payment of each year additional warranty /CMC/AMC will be made after satisfactory completion each year additional warranty / CMC/AMC separately. Detail terms & conditions | | | | |
| | • | ÷ | | | |
| are available in NIT clause No. 2.21. Bidders should quote the Additional Warranty and AMC/CMC as | | | | | |

applicable in the NIT Specifications/ requirement.

*(On the basis of the technical specifications submitted)

Total Online bid price _____ In words_____ Note: Cost spare parts may be indicated separately

| Signature of bidder | |
|---------------------|--|
| Name | |
| Business | |
| Address | |

(iii) STATEMENT OF FINANCIAL DEVIATIONS

Following are the financial deviations and variation(s) from the exceptions to the specifications and documents for the online bid document. These deviation(s) and variation(s) are exhaustive.

Except these deviation(s) and variation(s), the entire work shall be performed as per your specifications and documents.

| Sl No. | Section No. | Clause No. | Statement of Deviations / Variations |
|--------|-------------|------------|--------------------------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

S. No. Section No. Clause No. Statement of deviation(s) and variation(s)

Signature of the bidder Name: Place: Date: Address: Company Seal