

INDIAN INSTITUTE OF TECHNOLOGY GOA

At Goa Engineering College Campus
Farmagudi, Ponda, Goa 403401
E-mail: purchase@iitgoa.ac.in

GSTIN: 30AABAI1653D1ZF

PAN: AABAI1653D

TAN: BLRI08261B

Enquiry No: IITGOA/2020-21/023

Date: 17/02/2021

IIT Goa invites sealed quotations in two bid form for the supply of below mentioned item.

Sl. No.	Description of Item	Qty
1	Boiling Experimental Set up (Detailed specifications attached)	01

Terms & Conditions

1. Quotation must be valid for at least 90 days.
2. The GSTIN should invariably be mentioned in your offer.
3. Kindly attach a compliance certificate along with the technical quote.
4. Prices: Prices should be quoted in INR – F.O.R., IIT Goa basis only.
5. Payment terms: Within 30 days after the delivery and successful installation of items at IIT Goa.
6. Delivery and installation should be made within 4 weeks of getting a confirmed order.
7. Supplier should provide minimum one-year warranty for the above stated items.
8. In the last 5 years, the vendor should have supplied at least 10 heat transfer laboratory teaching equipment to CFTIs, IITs, IISERs and other Govt. of India organizations. Out of these 10 supplies, at least 4 should have been supplied to IITs.
9. Vendor must attach the reference list of supplies in last 5 years with contact details (Name, Phone, email address) of at least 5 users.
10. It must be kept in mind that mere copying of our specifications in the quotation shall not make the technical bid eligible for consideration.
11. A bid has to be supported with original catalogue (not of photo copy) of the quoted model duly signed by the principals and the same must be sent along with the technical bid.
12. The quoted model should not become obsolete for a minimum period of 5 years (This is for the availability of spares). Therefore, the model quoted should invariably be highlighted in the leaflet/literature enclosed with the quotation. Quotation should comprise of photograph of the model been quoted.

13. Non-compliance with above shall be treated as incomplete/ambiguous and the bid may be ignored without giving an opportunity to the bidder for further clarification/negotiation etc.
14. The suppliers shall provide the banking details along with their quote on their letterhead duly signed and stamped.
15. It is mandatory for bidders to quote items having Local Content more than 20%. Refer revised Public Procurement (Preference to Make in India), Order 2017 P- 45021/2/2017 – B. E. II dated 04.06.20 issued by DPIIT, Ministry of Commerce and Industry, Govt. of India.
16. The successful bidder has to submit a Performance Guarantee Bond for 3% of the Purchase Order value and valid till one year plus 60 days OR up-to warranty period whichever is later from the date of issue of Purchase Order. Performance Guarantee Bond may be submitted within 15 (Fifteen) days from the date of order acknowledgment as a successful bidder.
17. IIT Goa reserves the right to accept and/or reject any/all bids without assigning any reason in public interest.
18. For any clarification, you may kindly contact Dr. Rudra Narayan Roy (E-mail: rudra@iitgoa.ac.in) and Stores & Purchase Department (email: purchase@iitgoa.ac.in) till 26/02/2021.
19. Quotations shall be submitted in two parts;
Part – I (Technical) should contain all the technical details and specification of the product. It should contain unpriced bid along with terms and conditions, compliance certificates, proprietary certificates (if applicable), any other certificates/details etc. This envelope should be marked as “Technical Bid”
Part -II (Financial) The financial bid of the above item should be in a sealed envelope marked as “Financial Bid” and should contain financial terms and conditions.
20. All sealed quotations must be super scribed with the tender enquiry number and should reach to the Assistant Registrar (Stores & Purchase), IIT Goa, at Goa College of Engineering Campus, Farmagudi, Ponda, Goa, 403 401 by 17.00 Hrs on or before 10/03/2021.

Sd/-
Asst. Registrar (S&P)

Technical specifications of boiling experimental setup

1. Experimental setup should enable to study different form of evaporation, free convection boiling, nucleate boiling, pool boiling and film boiling.
2. It should have a provision to estimate heat transfer rate for different processes and determine the effect of temperature and pressure on the evaporation process.
3. The setup should have a provision to visualize the boiling and evaporation process in a transparent pressure vessel.
4. The setup should have a pressure vessel with a capacity of 2.8 litres.
5. There should be provision to carry out measurements for 0 to 4 bar pressure.
6. There should a safety valve (2 bar relative) to protects the system against overpressure.
7. For additional protection of the pressure vessel there should be a pressure switch, it should be adjustable
8. The setup should comprise of heating element i.e., heater for the studying the evaporation process.
9. Heater should have a maximum power output of 300 W. Provision should be there to adjust the power output in the range 0-300 W.
10. The setup should comprise of coiled tube made of copper for investigating condensation process.
11. Setup should have sensors for pressure, flow rate and temperature with respective digital displays.
12. Provision should be there for supplying cooling water from water chiller. It should have a provision for connection with main unit using hoses with rapid action couplings.
13. Water chiller should comprise of refrigeration unit to chill water and circulating pump.
14. There should be provision to carry out measurements for different flow rate of cooling water ranging from 0.05 to 1.8L/min.
15. Temperature measurement provision should be there for heater, liquid in the pressure vessel, cooling water supply.
16. The setup should have a refrigerant with following specifications: R1233zd, having Global Warming Potential: 1, volume 1.2 kg, 2. CO₂ equivalent: 0t
17. The water chiller tank should be around 15 L
18. The water chiller unit should comprise of necessary instruments like HP LP cut out switch, ON-OFF switch, filter drier.

19. Experimental unit should have a strong metal table to support weight of the experimental unit and chiller unit.
20. Setup should have microprocessor based instrumentation.
21. Data acquisition software should be provided.
22. Power supply should be as per the Indian standard of 220 V, 50 Hz.
23. Desktop PC with windows : Intel i5-7th generation, 8 GB RAM, 1 TB Hard drive (SATA), 17 inch monitor, Keyboard and mouse, Windows 10 64 bit, Microsoft office.
24. Must provide a user manual.
25. Scope of work: Installation of the equipment at IIT Goa

FORMAT FOR PERFORMANCE GUARANTEE BOND

(To be typed on **Non-judicial stamp paper** of the value of **Indian Rupees of One Hundred**) (TO BE ESTABLISHED THROUGH ANY OF THE NATIONAL BANKS (WHETHER SITUATED AT GOA OR OUTSTATION) WITH A CLAUSE TO ENFORCE THE SAME ON THEIR LOCAL BRANCH AT GOA OR ANY SCHEDULED BANK SITUATED AT GOA. BONDS ISSUED BY CO-OPERATIVE BANKS ARE NOT ACCEPTED.

To,
The Registrar,
Indian Institute of Technology, Goa
Farmagudi, Ponda,
Goa – 403401

LETTER OF GUARANTEE

WHEREAS Indian Institute of Technology, Goa (Buyer) have invited Tenders vide Tender No..... Dt. for purchase of

AND

WHEREAS the said tender document requires that any eligible successful tenderer (seller) wishing to supply the equipment / machinery, etc. in response thereto shall establish an irrevocable Performance Guarantee Bond in favour of “**Registrar, Indian Institute of Technology, Goa**” in the form of Bank Guarantee for Rs (**3% (three percent) of the purchase value**) and valid till **one year or upto warranty period whichever is later** from the date of issue of Performance Guarantee Bond may be submitted within 15 (Fifteen) days from the date of Order Acknowledgment as a successful bidder.

NOW THIS BANK HEREBY GUARANTEES that in the event of the said tenderer (seller) failing to abide by any of the conditions referred in tender document / purchase order / performance of the equipment / machinery, etc. this Bank shall pay to Indian Institute of Technology, Goa on demand and without protest or demur Rs..... (Rupees.....).

This Bank further agrees that the decision of Indian Institute of Technology, Goa (Buyer) as to whether the said Tenderer (Seller) has committed a breach of any of the conditions referred in tender document / purchase order shall be final and binding.

We, (name of the Bank & branch) hereby further agree that the Guarantee herein contained shall not be affected by any change in the constitution of the Tenderer (Seller) and/ or Indian Institute of Technology, Goa (Buyer).

Notwithstanding anything contained herein:

- 1. Our liability under this Bank Guarantee shall not exceed Rs. (Indian Rupees only).
- 2. This Bank Guarantee shall be valid up to(date) and
- 3. We are liable to pay the guaranteed amount or any part thereof under this bank guarantee only and only if IIT Goa serve upon us a written claim or demand on or before (date).
- 4. This Bank further agrees that the claims if any, against this Bank Guarantee shall be enforceable at our branch office at situated at (Address of local branch).

Date:

Yours truly,

Signature and seal of the Guarantor:

Name of Bank:

Instruction to Bank: Bank should note that on expiry of Bond Period, the Original Bond will not be returned to the Bank. Bank is requested to take appropriate necessary action on or after expiry of bond period.

Declaration of Local Content

(To be given on company letter head - For tender value below Rs.10 crores)
(To be given by Statutory Auditor/Cost Auditor/Cost Accountant/CA for
tender value above Rs.10 crores)

Date: _____

To,
The Registrar,
Indian Institute of Technology Goa,
At GEC Campus, Farmagudi, Ponda - Goa

Sub: Declaration of Local content

Tender Reference No: _____

Name of Tender: - _____

Country of Origin of Goods being offered: _____

We hereby declare that an item offered has % local content. _____

“Local Content” means the amount of value added in India which shall, be the total value of the item being offered minus the value of the imported content in the item (including all customs duties) as a proportion of the total value, in percent.

“*False declaration will be in breach of Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.”

Yours faithfully,

(Signature of the Bidder, with Official Seal)