

**Office of the Dean Research and Consultancy
Indian Institute of Engineering Science & Technology (IEST), Shibpur
Howrah-711 103**

Project Code: DRC/DST/CEGESS/HS/022/16-17

**Centre of Excellence for Green Energy & Sensor Systems
Indian Institute of Engineering Science & Technology (IEST), Shibpur
Howrah-711 103**

**Ref.: Tender Advt. No. CGE 1606, published in the “Statesman (All Edition)”,
“Dainik Statesman” & “Sanmarg”, dated 08.03.2020**

Notice Inviting Quotations

Sealed quotations are invited for the supply of :

Item. **Accessories of Existing Atmospheric Control Tubular Furnace.**

As per the following technical specification. The technical specification can be downloaded from the website. The document can be also obtained from the Centre of Excellence for Green Energy & Sensor Systems (**Contact : Prof. H. Saha / Prof. P. Chaudhuri**) between 10.30 a.m. and 5.30 p.m. on all working days. The invitation is valid for 07 working days from the date of publication of this notice.

(A. Code DRC-T089/19-20)

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SECTION I: TERMS & CONDITIONS

1. The last date of receipt of quotation is valid **for 07 working days** from the date of publication of this notice. Quotations received later will not be entertained under any circumstances.
2. Potential supplier are to submit the quotations in Sealed Cover to the Centre of Excellence for Green Energy & Sensor Systems in the following address:

Prof. H. Saha / Prof. P. Chaudhuri
CEGESS
IEST, Shibpur
Howrah-711 103, India.

3. **Item name & tender code must be mentioned on cover otherwise the quotation will not be accepted.**
4. The price quoted should be inclusive of all Taxes in INR, duties and levies. Inclusion of Tax/Levy at a latter stage will not be accepted. Freight, Insurance charges should be clearly indicated. If GST is chargeable then price quoted should be inclusive of GST in INR.@ 5%(**CGC will be provided by IEST, Shibpur**). Price should be CIF, IEST, Shibpur basic.
5. Vendor should have proven track record of supply in IEST, IIT, NIT, IISc.
6. Commercial Papers duly signed & must be attached.
7. Quotation has to be kept valid for acceptance for a period of 6 months without any modifications in its terms and conditions.
8. Documents to be submitted with the Quotations :
 - General Conditions (Section I) and Important Instruction (Clint list) in original duly signed by the Proprietor/ Partner/ Director or any authorized person of the company as a token of acceptance of Terms and Conditions of Tender.
 - Latest Income Tax, Sales Tax, Professional Tax, CST clearance certificates and copy of valid Trade License. (Photo copy duly signed) (Compulsory).
9. IEST, Shibpur, reserves the right to accept / reject all or any of the tenders without assigning any reason whatsoever.
10. Custom Duty Exemption Certificate will be provided by the IEST (If applicable).
11. **No advance payment will be made before the delivery of the item.**

SECTION II: TECHNICAL SPECIFICATIONS :-

Item.

Accessories of Existing Atmospheric Control Tubular Furnace

Working Tube :

Both end open fused clear Quartz tube, size is 165 mm ID X 170 mm OD X 750 mm length.

Vacuum/Gas flow Flange :

Detachable (screwed) type water cooling stainless Steel (grade 304) make atmosphere control flange fitted both end of working tube allow high vacuum upto 0.01 mbar. High precision ball valve with atmospheric pressure relished valve, Gas flow meter(range 0-2.5 lts/min) for inert gas, 100/250 lts/min capacity Vacuum Pump and vacuum indicator (digital Pirani gauge) fitted with flange.

Pirani Gauge :

“RANVAC” make Pirani gauge is used to measure vacuum in the range of 0.5 mbar to 10^{-3} mbar. Pirani gauge is provided with single sensors. Measuring range 1×10^{-3} mb. To 999 mb. (N₂ Equivalent), Display 3 digit 7 segment filament LED display, Resolution 1 digit of display, Response time 200 m seconds, No. of gauge heads one, 10 volts recorder output (provided on request), Operating temp. range is 10 to 85 Degree C, Bridge voltage is 2.5 V to 12.5 V approx, Process control relay is SPDT, 2A at 230 VAC resistive load, Contacts is SPDT, 2A at 230 VAC resistive load for each channel, Power 10W, Main supply-230V, 5 Amps, 50 Hz.

Temperature Indicator with computer interface :

Yudian’ make 6 channel temperature indicator with computer interface and sensor. Display 3 digit 7 segment LED display, Resolution 4 digit of display, Response time 20 m seconds, No. of sensor heads six.