

TENDER NOTICE

Tender No.: *DST PURSE/Phys/2019-2020/4*

Date: 7th February, 2020

A Water Chiller with 2TR capacity will be procured for the Closed Cycle Cryostat associated with the confocal Micro Raman Spectrometer under DST PURSE Scheme. The details of the tender specification are given herewith:

1) Eligibility criteria for participation in the Tender :

- A) The Bids shall be submitted by only the OEM (Original Equipment Manufacturer) or authorized sales and service provider of OEM in case OEM is not participating. Declaration from OEM specific to this tender in this regard needs to be submitted.
- B) The quoted chiller should be compatible with the closed cycle cryostat.
- C) The tenderer must take the responsibility for the delivery, installation and commissioning of the product at the site specified during the order process and at time specified during the order process. Delay in installation and /or commissioning will be subject to penalize.
- D) Manufacturer should be ISO 9001:2008 Certified and/or certified under MSME category.
- E) Manufacturer should have factory and R&D in India. Manufacturer is required to provide the full details of factory address in India.
- F) The Bidder shall be an established manufacturing company for chillers and related equipment registered under the Companies Act, 1956 having operations in India for the last three years as on 31.12.2019 (Certificate of Incorporation) and submit valid documentary proof of
 - Certificate of incorporation
 - Valid Trade License
- G) The Bidder should have delivered and installed at least two similar equipments to support high value sophisticated scientific instruments at reputed research institutions/Universities in India.

2) Technical specifications :

The details of the technical Specifications for the water chiller with 2 TR capacity is given in Annexure-2

Last date of receipt of Quotations : 19th February, 2020

Debitable Head : DST-PURSE Scheme

Sealed Quotations (addressed to the undersigned) are invited from the Vendors. Vendors are requested to submit quotation along with the photocopy of current trade license, PAN Card, GST certificate and other requisite documents.

The Head
Dept. of Physics, University of Calcutta

ANNEXURE-2

Technical specification for 2 TR water chiller

Description	Specification
Nominal Cooling Capacity	6000 Kcal/Hr~2 TR @15°C water outlet temperature
Temperature stability	+ 2°C or better
Rated media temperature	15-30 °C
Cooling Media	Clean soft water
Min and Max operating ambient temperature at site	10-45 °C
Rated flow rate	10-25 LPM or better @ 4.5 bar at chiller outlet
End Connection	1" BSP
Required power supply for chiller	3 Phase, 415 V, 50 Hz and Earthing
Allowable Voltage variation	± 10%
Power and Current at full load	4.5 KW, 10 Amps
Control Voltage	1 Phase, 230 V, 50 Hz
Safety Interlocks	HP trip, LP trip, Single phase preventer trip, low water level trip, Motor over load trip should be provided Water flow switch at Chiller inlet, with cut off option if no flow into chiller, should be provided Low and high temperature alarm should be provided
Refrigeration	
Refrigerant	R134a / R407C / R22
Refrigeration circuits	One scroll compressor
Condenser	Air cooled condenser with internally grooved copper tubing, Aluminium fins, with heavy duty exhaust fans
Evaporator	Plate heat exchanger
Chiller	Chiller internal piping should be non corrosive, anti scalling
Expansion device	Thermostatic expansion valve
Filter drier	Silica gel type filter drier should be provided
Electrical	
Controller	Microprocessor based temperature controller
Switches	High and low pressure switch should be provided MPCB, Contactor, main switch should be provided LED indicators, float switch should be provided
Environment standards and protection class	As per IP55 norm
Water	
Water reservoir	SS non corrosive water reservoir with TIG welded joints duly isolated
Pump/motor	SS304 impeller centrifugal pump coupled with motor
Bye pass line	Bypass line with a Gate valve at pump discharge line to regulate the pressure from 2 bar to 4.5 bar
Port	Drain port with control valve should be provided Top up port, Overflow port should be provided
Pressure gauge	Pressure gauge, level indicator should be provided
Structure	
The quoted chiller should be treated and powder coated to standard color	
Should be compatible for use in a clean dust free environment	
IMPORTANT	
The Technical Specification along with Credentials & Eligibility should be certified and verified as per the tender notice.	

TENDER NOTICE

Tender No.: *DST PURSE/Phys/2019-2020/5*

Date: 7th February, 2020

A Vibrational Isolation Table will be procured for housing the confocal Micro Raman Spectrometer under DST PURSE Scheme.

Quotations are invited from reputed vendors to supply a Vibrational Isolation Table with following Technical Specifications:

1) Table:

- a) **Size:** 2400 mm x 1500 mm
- b) **Thickness:** 100 mm or higher
- c) **Top Skin:** Thick magnetic SS of thickness 5 mm or higher
- d) **Core :** Honeycomb core made of 0.2 mm or higher aluminum sheet
- e) **Mounting Holes :** M6 tapped holes on top of 25 mm grid
- f) **Working Height:** 800 mm (minimum)

2) Passive Vibrational Isolation support for the above table top (interconnected less)

- a) The isolated legs should be interconnected by pneumatic tubes for air filling.
- b) Air should be pumped using a compressor to uniformly distributed to all the isolator legs.

3) Suitable Air compressor should be provided

Last date of receipt of Quotations : 19th February, 2020

Debitable Head : DST-PURSE Scheme

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The Head
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