



IISER Mohali

# भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान मोहाली

मानव संसाधन विकास मंत्रालय, भारत सरकार द्वारा स्थापित  
सैक्टर 81, नॉलेज सिटी, पी. ओ. मनोली, एस. ए. एस. नगर, मोहाली, पंजाब –140306  
INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH MOHALI  
Sector-81, Knowledge city, PO-Manauli, SAS Nagar Mohali-140306, Punjab  
PAN NO. - AAAAI1781K TAN NO. PTLI10692D

• Phone : +91-172-2240086,2240121 • Fax : +91-172-2240124, 2240266 • <http://www.iisermohali.ac.in> • Email: [stores@iisermohali.ac.in](mailto:stores@iisermohali.ac.in)

## **E-TENDER NOTICE**

Tender Ref.- IISERM(712)16/17Pur/02

Dated :- 13<sup>th</sup> January 2017

### **Critical Date Sections**

Sr.	Description	Date	Time
1.	Tender Publishing Date and time	18 <sup>th</sup> January 2017	6pm
2.	Tender Document download start Date & Time	18 <sup>th</sup> January 2017	6pm
3.	Bid Submission start Date & Time	18 <sup>th</sup> January 2017	6pm
4.	Bid Submission End date and Time	06 <sup>th</sup> February 2017	Up to 2pm
5.	Tender opening Date and Time	07 <sup>th</sup> February 2017	At 4pm

Online tenders are invited on behalf of Director, IISER Mohali in **TWO BID SYSTEM** {Technical and Commercial separate} for following item(s) from the original manufacturer/supplier at CPPP i.e. <https://eprocure.gov.in/eprocure/app>. Tender documents may please be downloaded from the E-procurement portal website <https://eprocure.gov.in/eprocure/app> & Institute website <http://www.iisermohali.ac.in>. Tender fee in shape of DD/Banker Cheque of Rs 1000/- (Non-refundable) and EMD of Rs 3,60,000/- should be submitted by DD /Banker Cheque/FDR/ Bank Guarantee in favour of the Registrar, IISER Mohali payable at Mohali. However, scanned copy of the both tender fee and EMD should be upload on website along with technical bid part. The hard copy of the same in original to be send to the address mentioned below duly superscribing the supply/work name and reference/ tender ID on the envelope and same must reach before opening the bid and if not received within due date the bid will be rejected summerly.

### **The Original EMD and tender fee should be sent to**

Assistant Registrar (S&P)  
Indian Institute of Science Education and Research,  
Mohali Sector 81, SAS Nagar, Mohali, Punjab, India,  
Pin: 140306

**Non-receipt of original EMD and tender fee will lead to rejection of tender.**

**Item Details: -**

Sr.	Description
1	<b><u>High Field Magnet</u> - Vertical field superconducting magnet comprising of:</b> <ol style="list-style-type: none"><li>1. field greater than 16T</li><li>2. Magnetic central bore size &gt; 53mm. In case 53mm bore size cannot be technically provided, the vendors are requested to quote the highest bore size that can be provided. However, based on the offers received, the institute may or maynot consider lower bore size.</li><li>3. Central field homogeneity of 0.1%</li><li>4. Field homogeneity length of 10mm</li><li>5. Bottom loaded magnet to reduce the effective neck diameter</li><li>6. Should run at 4.2K for more than 16T</li><li>7. Full persistent mode with control</li></ol>
2	<b>Low Loss Cryostat for 16T Magnet</b> <ol style="list-style-type: none"><li>1. Non magnetic helium vessel</li><li>2. Liquid nitrogen cooled radiation shield</li><li>3. Gas cooled secondary radiation shield</li><li>4. Optimized multilayer super insulation</li><li>5. Liquid nitrogen jacket</li><li>6. Aluminium outer vacuum vessel</li><li>7. Over pressure relief valve</li><li>8. Bellows sealed vacuum evacuation valve</li><li>9. Integrated Variable Temperature Insert (VTI)</li><li>10. Integrated liquid helium level indicator</li><li>11. Cryostat should be fitted with liquid Helium level gauge, temperature sensors (CCS) and a heater at the base of the vessel to remove nitrogen on precooling.</li><li>12. The loss should be less than 4 liters/day when the magnet and the VTI are not running.</li><li>13. The cryostat must be integrated with a reliquefier having a recondensing rate greater than 27 liters/day. All accessories including the compressor for the reliquefier must be provided. Minimum 3 years warranty must be included for the reliquefier.</li></ol>
3	<b>Integrated Temperature Insert (VTI) for 16T Magnet</b> <ol style="list-style-type: none"><li>1. Should provide a dynamic temperature control in the range of 1.4 to 325K using an integral heater and calibrated cernox sensor.</li><li>2. VTI top plate should have the access to an instrumentation port for heater and sensor wiring, a sample space pumping port of NW25KF and an NW50KF sample access port.</li><li>3. Dynamic VTI should have an outer diameter of 51mm.</li><li>4. Should offer an airlock, gate valve assembly and pressure relief valve corresponding to the VTI.</li></ol>
4	<b>Vector Field</b> <ol style="list-style-type: none"><li>1. Magnetic field 9T-2T-2T</li><li>2. Central bore size <math>\geq</math> 53mm</li><li>3. Central field homogeneity of 0.1%</li><li>4. Field homogeneity length of 10mm</li><li>5. Bottom loaded magnet to reduce the effective neck diameter</li><li>6. Full persistent mode with control for all the three axes</li></ol>

5	<b>Low Loss Cryostat for Vector Field</b> <ol style="list-style-type: none"> <li>1. Non magnetic helium vessel</li> <li>2. Liquid nitrogen cooled radiation shield</li> <li>3. Gas cooled radiation shields (of high purity Aluminium)</li> <li>4. Optimized multilayer super-insulation</li> <li>5. Liquid nitrogen jacket</li> <li>6. Welded outer can of Aluminium with wear resistant paint</li> <li>7. Full demountability, using o-ring seals to permit full access to all internal parts</li> <li>8. Over pressure relief valve</li> <li>9. Bellows sealed vacuum evacuation valve</li> <li>10. Integrated Variable Temperature Insert (VTI)</li> <li>11. Integrated liquid helium level indicator</li> <li>12. Cryostat should be fitted with liquid Helium level gauge and level meter, temperature sensors (CCS) and a heater at the base of the vessel to remove nitrogen on precooling.</li> <li>13. The loss should be less than 4 liters/day when the magnet and the VTI are not running.</li> <li>14. The cryostat must be integrated with a reliquefier having a recondensing rate greater than 27 liters/day. All accessories including the compressor for the reliquefier must be provided. Minimum 3 years warranty must be included for the reliquefier.</li> </ol>
6	<b>Integrated Temperature Insert (VTI) for Vector Field (Optional)</b> <ol style="list-style-type: none"> <li>1. Should provide a dynamic temperature control in the range of 1.6 to 325K using an integral heater and cernox sensor.</li> <li>2. VTI top plate should have the access to an instrumentation port for heater and sensor wiring, a sample space pumping port of NW25KF and an NW50KF sample access port.</li> <li>3. Dynamic VTI should have an outer diameter of 51mm.</li> <li>4. Should offer an airlock, gate valve assembly and pressure relief valve.</li> </ol>
7	<b>Magnet Power Supplies:</b> <ol style="list-style-type: none"> <li>1. 20 bit Power supply for 16T magnet</li> <li>2. Three independent sets of 20 bit power supplies required for 9T-2T-2T vector field.</li> <li>3. Easy to use front panel push button operation</li> <li>4. Automatic quench detection and protection with internal energy absorber</li> <li>5. Accurate ramp with dual set point and pause, with automatic voltage limit for fast ramping</li> <li>6. Auxiliary analogue and digital interfaces for peripherals (including Cryogenic HLG units for low helium safety, external trip inputs, all available for remote reading via the USB interface)</li> <li>7. Adjustable switch heater output</li> <li>8. USB interface as standard.</li> </ol>
8	<b>Labview Control Automation</b> All the labview based control modules for the magnet controllers must be provided.

### **SUBMISSION OF TENDER**

- I. All bid/ tender documents are to be uploaded online at Central Public Procurement portal i.e <https://eprocure.gov.in/eprocure/app> only and in the designated cover/ part on the website against tender ID. Technical bid and financial bid shall be submitted in the designated online cover/part. Tenders/ bids shall be accepted only through online mode and no manual submission of the same shall be entertained except tender fee and EMD.

Late tenders will not be accepted.

- II. The online bids shall be opened at the office of the Assistant Registrar (P&S), IISER Mohali, on above given date. If the tender opening date happens to be on a holiday or non-working day due to any other valid reason, the tender opening process will be attended on the next working day at same time and place. IISER Mohali will not be responsible for any error like missing of schedule data while downloading by the Bidder.
- III. The bidder shall upload the tender documents duly filled in and stamped by the authorized signatory on each and every page. Tender not submitted/uploaded in the prescribed form and as per the tender terms and conditions shall be liable for rejection.
- IV. The bidder shall upload scanned copy of the TIN number, PAN Card, VAT registration certificate/VAT return, Service tax registration number duly signed and stamped.
- V. E-procurement system ensures locking on the scheduled date and time. The system will not accept any bid after the scheduled date and time of submission of bid.

## **INSTRUCTIONS**

1. The Online bids should be submitted directly by the original manufacturer/supplier, If quotation is submitted/filled by any representative/agent/dealer then they must upload a authority certificate from the principal company for quoting the price otherwise such quotation will be rejected.
2. The quantity mentioned in this inquiry is and shall be deemed to be only approximate and will not in any manner be binding on the Institute. Before the deadline for submission of the online bid, IISER Mohali reserves the right to modify the tender document terms and conditions. Such amendment/modification will be notified on website against said tender ID
3. The rates offered should be FOR Chandigarh/Mohali in case of firms situated outside Chandigarh/Mohali, and free delivery at the Institute premises in case of local firms. Supplier from outside India should mention the Ex-works/FOB/FCA/CIF/CIP price clearly. Conditional tenders will be summarily rejected.
4. In case of Ex-godown terms the amount of packaging forwarding freight etc should clearly be indicated by percentage or lump sum amount. Institute has policy not to make any advance payments towards any purchase, Letter of credit can be opened if required.
5. THE INSTITUTE IS EXEMPTED FROM EXCISE AND CUSTOM DUTY under notification no- 51/96 –CUSTOM DATED 23/7/1996 AND DSIR REGISTRATION NO TU/V/RG/- CDE(1062)/2011 DT. 02/09/2011 / EXCISE NOTIFICATION NO. 10/97-CENTRAL EXCISE DT. 01.03.1997.
6. Tax: This Institute is not exempted from the payment of Sales Tax/Service Tax/VAT. The current rate (i.e. percentage of Sales Tax should be clearly indicated included or excluded) wherever chargeable. Please also provide/upload the copy of PAN card, TIN number, Service

tax number, Sales tax number duly self-attested.

7. The delivery period should be specifically stated. Earlier delivery will be preferred
8. The firms are requested to provide/upload detailed description and specifications together with the detailed drawings, printed leaflets and literature of the article quoted. The name of the manufactures and country of manufacture should also invariably be stated. In the absence of these particulars, the quotation is liable for rejection.
9. Validity of offer: 90 days. The warranty period after satisfactory installation should be mentioned and firm should replace all manufacturing defect parts/ whole item under warranty without any extra cost including clearance, freight, taxes. Security deposit/ Bank Performance Guarantee @ 10 % of the value of supply order as per norms may be sought from the firms.
10. The right to reject all or any of the quotation and to split up the requirements or relax any or all the above conditions without assigning any reason is reserved by the IISER Mohali. For any corrigendum and addendum please be checked the website <https://eprocure.gov.in/eprocure/app> and <http://www.iisermohali.ac.in>
11. Disputes, if any, shall be subject to jurisdiction in the court of Mohali only.

-sd-  
(Mukesh Kumar)  
Assistant Registrar (S&P)