



# भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान मोहाली

मानव संसाधन एवं 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

**IISER Mohali**

PAN NO. - AAAAI1781K TAN NO. PTLI10692D

• Phone : +91-172-2293118-19 • Fax : +91-172-2240124, 2240266 • <http://www.iisermohali.ac.in> • Email: [stores@iisermohali.ac.in](mailto:stores@iisermohali.ac.in)

E-mail/CPPP /website

IISERM(588)15/16 Pur

04<sup>th</sup> September 2015

## NOTICE INVITING QUOTATIONS

Sealed Quotations in **TWO BID SYSTEM** are invited on behalf of The Director IISER Mohali for following items along with EMD money by DD /Banker Cheque/ FDR/ Bank guarantee for Rs 10000/- and tender fee of Rs 500/- (separately non re-fundable) in favour of the Registrar, IISER Mohali, so as to reach us latest by 25<sup>th</sup> September 2015 before 1pm and will be opened on the same day at 4pm. in the presence of tenderers, if any :-

Sr	Description
01	FTIR Spectrometer for Matrix isolation infrared spectroscopy - 01 No. (As per specification enclosed)

-sd-  
Assistant Registrar (S&P)

## **INSTRUCTIONS**

1. The Quotation should be addressed to the Assistant Registrar (S&P), IISER Mohali invariably giving on the envelop Reference number with due date and time of submission of quotation.
2. One time importers from China with custom made specifications are highly discouraged.
3. 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.
4. 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 outside India please mentions the Ex-works/FOB/FCA/CIF/CIP price clearly.
5. 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.
6. THE INSTITUTE IS EXEMPTED FROM EXCISE AND CUSTOM DUTY.
7. SALES 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.
8. The delivery period should be specifically stated. Earlier delivery will be preferred
9. The firms are requested to give 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.
10. Validity of offer: 90 days. Firm should replace all manufacturing defect parts/ whole item under warranty period without any extra cost including clearance, freight, taxes. Security deposit/ Bank Performance guarantee for 10 % of the value of supply order as per norms may be sought from firms.
11. Late or delayed quotation will not be accepted.
12. 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. For any corrigendum and addendum please regularly visit our website.

## Specification Requirement of FTIR Spectrometer for matrix isolation infrared spectroscopy

<b>The Instrument:</b>	FTIR spectrometer for matrix isolation infrared spectroscopy
<b>Optics:</b>	All mirrors should be gold coated
<b>Spectral range:</b>	350 – 8000 $\text{cm}^{-1}$
<b>Spectral resolution:</b>	0.5 $\text{cm}^{-1}$ or better
<b>Wavelength accuracy:</b>	$\leq 0.01 \text{ cm}^{-1}$ @ 2000 $\text{cm}^{-1}$
<b>Photometric accuracy:</b>	0.1% or better
<b>Signal to Noise: (achievable)</b>	Should be better than 40,000:1 peak-to-peak @ 1-minute measurement (In the order of $10^{-6}$ Absolute noise)
<b>Interferometer:</b>	High stability interferometer with permanent alignment
<b>IR-Source:</b>	Globar
<b>Detector:</b>	DLATGS (with high sensitivity and should be useable at room temperature)
<b>Laser:</b>	Diode laser with long life time
<b>Scan Speed:</b>	Should have multiple and selectable velocities in the range, 1.5 – 50 mm/sec opd
<b>Spectra rate:</b>	$\leq 25$ spectra/sec @ 16 $\text{cm}^{-1}$ optical resolution
<b>A/D convertor:</b>	True 24 bit dynamic range for all scan velocities
<b>Sample compartment size:</b>	> (25 cm (W) X 25 cm (D) X 15 cm (H)) (Minimum W = 25 cm; Minimum D= 25 cm and Minimum H = 15 cm) Sample compartment size is very important, which needs to fit the spectral window of matrix isolation set up. There should be no obstacle in the sample compartment (within the above mentioned dimensions), if present, that should be easily detachable without affecting the functionality of the spectrometer. Also, the lid for closing the sample compartment of the spectrometer should easily be detachable.
<b>Interface/Computer/Printer:</b>	The spectrometer should be appropriately interfaced to a PC using Windows operating system, having 240 AC/50 Hz operation with Indian electrical connectivity. A suitable computer (with reasonable configuration, which needs to be indicated), along with a 27 inches monitor and a multifunctional laser printer (with copying and scanning facilities) should be included in the price quotation.
<b>Software:</b>	Software should be capable of instrument control, data acquisition, and data processing. Processes such as FFT, baseline correction, spectral subtraction, and options like spectral calculator and customized spectral recording etc. should also be available. The software should be capable of opening spectrum of different format such as JCAMP-DX also. Details of software must be clearly mentioned. The data analysis part of the software should have the possibility for getting installed in multiple computers.
<b>Accessories:</b>	Must include basic accessories, such as KBr pellet holder, die set, pellet press and KBr liquid cells. Pellet press (Indian make) for making KBr pellets should be available with all safety features.  For purging of dry air or nitrogen, special regulator should be included.
<b>Extra accessories:</b>	Gas cell should be quoted separately as an optional item.
<b>Installation and training:</b>	Installation and training should be provided at the customer site. Installation requirement should be intimated in advance.

<b>Power options:</b>	The spectrometer and related items should be provided with power cords and other necessary accessories that should be suitable for Indian electrical connections (240 V AC/50 Hz).
<b>List of users:</b>	A list of users with full contact details (in India) of the proposed system should be provided.
<b>Warranty:</b>	A minimum of 2 (two) years warranty is required. A Comprehensive Annual Maintenance Contract (CAMC) for additional 3 (three) years must be included. (Quote separately).
<b>Customer service:</b>	Historical data should be provided from current users.
<b>UPS:</b>	Suitable UPS of 3 kV capacity should be provided in a separate quote.
<b>Company profile in India:</b>	Document on the market share of the company in India should be provided. Proof of authorization from the parent company to sell and services of the equipment in India must be supplied by the vendor.