



OFFICE OF THE JOINT DIRECTOR,
CUSTOM HOUSE LABORATORY, CUSTOM HOUSE,
60, RAJAJI SALAI, CHENNAI – 600 001.
Tel: 044-25244164, 25254395 Fax: 044-25271918

LIMITED TENDER INVITING QUOTATION

Sealed quotations are invited from the suppliers for the supply of **Fourier Transform Infrared Spectrophotometer** as per the specifications and terms & conditions enclosed herewith in Annexure 'A' (Page 1&2) for the use of Customs House Laboratory, Chennai.

- The quotation should be marked as "Quotation for Fourier Transform Infrared Spectrophotometer" and addressed to the Joint Director, Custom House Laboratory, Custom House, 60, Rajaji Salai, Chennai-1.
- The last date for the submission of quotation is 14.06.2013 till 17.00 hrs. Quotation received after due date will be summarily rejected.
- The quotation should be signed by the authorized person and his full name and status should be indicated below his signature.

F.No. S.Misc.8/96-97 Lab
Dated: 08.05.2013

Sd/-
08.05.2013
Joint Director
Custom House Laboratory,
Custom House,
Chennai-1

FOURIER TRANSFORM INFRARED SPECTROMETER (FT-IR)**Specifications****FTIR spectrophotometer having following specifications:**

- 1) Fully Computer Controlled compact bench-top FTIR system with universal sample compartment for working with all commercially available accessories.
- 2) The system should have kinematically mounted, zero alignment optics for long- term stability reliability and reproducibility of the optical components.
- 3) The Mirrors should have high reflectivity, smooth surface incorporating a low-angle off axis design
- 4) The system should have latest digital signal processor.
- 5) The instrument should indicate whether the source and laser are operational.
- 6) Wavelength range: 7500 to 375 cm^{-1}
- 7) Detector: DTGS detector.
- 8) Resolution: 1 cm^{-1} or better
- 9) S/N Ratio: > 34000:1 Peak to Peak, 4 cm^{-1} for 1 minute scan or better.
- 10) Wavelength precision: 0.01 cm^{-1} .
- 11) The system should have provision for high throughput screening applications With automation software and relevant accessories.
- 12) The system should have sealed and desiccated optics with built-in purge facility if required.
- 13) The software should have real time data collection and should have the facility to continuously monitor the performance of source, detector, power supply and laser.
- 14) The system should be supplied with multi-media tutorials.
- 15) The system should be supplied with windows compatible operating software with standard features like Data Collection, Data Processing facilities.
- 16) The software should also have: Spectral search; Peak picking; Peak analysis tools; Automatic atmospheric suppression; SOP builder; Spectral interpretation tools; Quality checks programs, quick compare, quantification facility.
- 17) The system should have provisions to compensate the effect of atmospheric water and CO_2 Interference in real time.
- 18) An Electronic humidity sensor (hardware) should be part of the system to indicate humidity inside optics and to suggest the time to change the desiccant
- 19) The instrument should have automatic validation (NIST Certified Polystyrene film) including certified standard for abscissa measurement and standard for Ordinate measurement. The standards should be mounted on the filter wheel and it should be part of optics.
- 20) The Jaquinot stop/Aperture for variation in resolution should be controlled Through software and built-in inside the sealed and desiccated optics.
- 21) Accessories: ATR (for solids, liquids, films, paste, gel, LDPE/HDPE), variable width Liquid cell, Hydraulic Press for KBr pellet with Pellet Holder
- 22) Spares and consumables including nitrogen cylinder with moisture trap regulator if required for operation of instrument for 5 years
- 23) PC/Printer: Pentium IV, with latest configuration, 17 "TFT SVGA colour monitor and Laser Jet colour printer
- 24) Libraries: General Chemical Library, ATR Polymer Library, Agriculture Chemicals & Pesticides library and Drugs library, Library for Fuel oil, Lubricants, Petroleum products.



Terms & conditions

- The price of the Instrument should be quoted in **Indian Currency only**, F.O.R, Custom House Laboratory, Custom House, Visakhapatnam, Andhra Pradesh. Separate quotation for Different model & make should be quoted.
- Rates for items under accessories and optional should be quoted separately.
- The taxes applicable and other charges if any are to be explicitly & separately mentioned.
- Consumables & spares worth for trouble free running of the instrument for three years should be quoted separately.
- Warranty should be for at least one year from the date of installation and commissioning of the instrument. AMC to be provided after the warranty period.
- Failure of the instrument during the warranty period should be promptly attended by the Supplier at his own cost & any defective parts should be replaced with new parts at free of cost. A warranty certificate declaring these points must be sent along with the quotation.
- The instrument should be installed, calibrated & standardized by Service Engineer. 'On site training' to our staff for complete operation & maintenance of the instrument should be provided.
- Calibration certificates if any for the instrumental parts should be submitted.
- Manual or catalogue or pamphlets in English showing technical specification with photograph or picture of the instrument should be enclosed.
- Manufacturer/Supplier should guarantee for the supply of original spares, adequate servicing & up gradation of the instrument whenever asked for.
- A compliance sheet indicating clearly whether the instrument specifications are met or not should be attached. The deviations if any should be mentioned clearly.
- Users' list of the instrument within last three years with contact details is to be enclosed.
- The quotation should be valid at least for 'six months' from the due date.
- Mere quoting lowest price does not confer any right to any firm for award of supply order. Selection of the firm based on the technical specification compliance, quality, reliability durability performance, Service back up support etc also.
- 100 % Payment will be made only after the supply, satisfactory installation and performance of the instrument. No advance payment shall be made.
- Incomplete & conditional and tenders received after closing date & time will not be considered.
- The quotation received through fax/e-mail will not be accepted. The office shall not be responsible for any delay/loss or non-receipt of the tender by post/courier service.