



INSTITUTE OF FORENSIC SCIENCE & CRIMINOLOGY

(1st floor Old BMS Building)

PANJAB UNIVERSITY, CHANDIGARH-160 014 (INDIA)

(Estd. Under the Panjab University Act VII 1947 enacted by the Govt. of India)

Phone: (office) 0172-2534125

Email: ifsc@pu.ac.in

Registered

Ref. No. _____

Dated: _____

Dear Sir/Madam:

Quotations are invited for the purchase of **FT-IR** by the Institute of Forensic Science & Criminology, Panjab University, Chandigarh from 'Equipment grant' sanctioned under the DST PURSE II grant as per the specifications attached

While submitting the quotation please note the following terms and conditions:

1. **Quotation should be submitted in two parts** (Technical quote and Financial quote should be in separate sealed envelopes): (a) **Technical bid** consisting of all technical details along with commercial terms and conditions; (b) **Financial bid** indicating item-wise price for the items mentioned in the technical bid. Validity should be at least 90 days
2. Quotation should be accompanied with **2% EMD** of estimated cost of the equipment in favour of **Prof. Rajat Sandhir, Coordinator, Institute of Forensic Science & Criminology, Panjab University, Chandigarh**. Quotation without EMD will not be considered.
3. Certify that the equipment is of latest technology
4. Please certify if you are the manufacturer/authorized selling & service agent/distributor for the equipment.
5. Also provide: (a) Certificate that the quoted price is reasonable, not greater than that charged from any other Govt Institute; (b) Copy of agreement with you as authorized Indian agent; (c) User list in India
6. It should be clearly stated that the rates are inclusive of sales and other taxes and everything including packing, transport, freight, insurance, custom charges, etc.
7. The rate should be strictly **F.O.R. destination (Chandigarh)**
8. The quotation under sealed envelope should be sent to **Prof. Rajat Sandhir, Coordinator, Institute of Forensic Science & Criminology, Panjab University Sector-14, Chandigarh** by name under Registered cover/ Speed post/Courier/by hand.
9. **Payment: After delivery and installation**
10. The **last date** for the receipt of quotation in the Department is **28.10.2016**
11. The envelopes containing the quotation should be superscribed as "**Quotation for FT-IR**" due on **28.10.2016**.

Prof. Rajat Sandhir,
Coordinator

Enclosed: Specifications Attached as Annexure - I

Specifications for Fourier Transmission Infra-Red Spectrometer

Wavenumber Range	8000–350 cm ⁻¹ or better
Wavenumber Accuracy	Should be 0.1 cm ⁻¹ or better
Beam Splitter	KBr
Wavenumber reproducibility/ precession	Should be 0.05 cm ⁻¹ or better
Spectral Resolution:	Should be 0.5 cm ⁻¹ or better
Sensitivity Peak to peak noise:	Should be 45,000 : 1 peak to peak or better
Source	Mid IR source / as per wavenumber range
Reference Laser	Solid state laser or He-Ne laser
Interferometer	Permanently aligned gold coated mirrors or better technology
Detector	Must be DTGS/ DLATGS Detector
Optics	Completely sealed and desiccated optics with life indicator with Transmission module
Software	Suitable software for Spectral collection, Quantitative analysis, baseline correction, smoothening, derivitization, spectral deconvolution.
Accessories	<ul style="list-style-type: none"> i. Transmission module must be quoted with Pellet Holder/ Liquid Cell, Die Set, KBr Powder, Silica Gel (Sufficient quantity for unkeep), Agate/pestle & 15 ton HYDRAULIC Press, NIST certified/traceable polystyrene film for calibration (5 years). ii. Must have suitable ports for future upgradation like GC-IR interface, TGA-IR interface, and IR microscopy, etc. iii. System should be quoted with certified library for 2500 – 3000 or more spectras for catering different applications like forensic, food additives, contaminants, polymers, pharmaceuticals, etc. iv. Automatic vapor correction. v. ATR accessories with diamond crystal should be quoted vi. Latest Configured computer with latest genuine windows, 4 GB RAM, Online 5K UPS with 30 min back up, optical mouse and laser jet printer at the time of installation vii. Air conditioner (Split 1.5 ton) for maintenance control of temperature viii. Upgradation for temperature in reflection and transmission mode and also gas inlet ix. Purge kit for internal purging of optics (if required) x. N₂ cylinder (if required)
Installation and training	Installation and training to users should be given at our laboratory by a trained Application engineer.
Warranty	5 year warranty on interferometer (including beam splitter), laser and source. Extended warranty should also be quoted separately.

All the accessories required for the installation or demonstration must be included.

Consumables and non consumables should be quoted for 3 years

The system should be quoted F.O.R. PU, Chandigarh. All custom clearance and transportation should be borne by company.

Components should be made available for atleast 10 years or more.