

## FTIR Spectrometer and accessories with following specifications:

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|-----------------------|---|
| <b>Spectral Range</b> | <b>8000 to 30 cm<sup>-1</sup></b>   |
| Wave Number accuracy  | 0.02 cm <sup>-1</sup> achievable or better  |
| Resolution            | 0.6 cm <sup>-1</sup> or better  |
| <b>Beam Splitter</b>  | <b>MID IR &amp; FAR IR, 8000 to 30 cm<sup>-1</sup></b>                              |
| S/N Ratio             | 45000: 1, P to P at 4 cm <sup>-1</sup> resolution<br>in one min time scan or better |
| Detectors             | DLATGS/Room Temperature /DTGS   |

- Suitable detectors & Beam splitters should also be given for a range of 30 cm<sup>-1</sup> to 8000 cm<sup>-1</sup>.
- Instrument should be fully software controlled including fully automated changeover of sources, detector s& beam splitters.
- Beamsplitter changeover should be fully software controlled with motorized hardware, without any manual interruption.
- Optics should be with high performance suitable coatings.
- In future system should be upgradeable with TG-IR coupling, IR-Microscope coupling.
- Automatic real-time Atmospheric Vapor Compensation
- System software for complete data analysis for deconvolution and Krammers-Kronig relations etc. should be given free of cost with instrument.
- Michelson interferometer (must be non mechanical bearing) for fast scanning, self-compensating for dynamic alignment changes due to a tilt and shear, incorporating high reflectivity
- Compatible branded PC, Laser Printer and online UPS with 30 min backup should also be provided with instrument.
- Standard company made 15 ton Hydraulic Press, Agate Mortar Pestle, KBr(Spectroscopy grade) Die set, Magnetic Film sample holder, demountable liquid cell etc should also be given with instrument.
- Printed catalogues & specification sheet along with tender Compliance Statement must be enclosed with the Offer.
- Fully automated Software controlled minimum 05 position inbuilt validation wheel.
- Nitrogen purging accessories should be provided with instrument
- Custom Clearance against Custom exemption certificate & transportation should be done by supplier & Instrument and all accessories should be given F.O.R GNDU Amritsar.
- Training on site by company engineers on complete FTIR system and accessories.
- Minimum 2 years warranty should be given on complete system including accessories
- All technical specification should comply as per printed technical literature, Documents & specifications
- Compliance Statement must be enclosed with the Offer.

### OPTIONAL ACCESSORY:

1. Diamond ATR
2. DRS
3. Specular Reflection Accessory

Reputed firms should submit their offers (2 bids consisting of Technical Bid and the Financial bid) to Head, Physics Department, Guru Nanak Dev University, Amritsar-143005 with earnest money @ 2 % of the total bid amount (including optional accessories) in favor of the Registrar, GNDU, Amritsar. Incomplete bids will be rejected.