

Amendment in Technical Specifications of MICRO ATR- FTIR

Bidder Eligibility Criteria-I

Sl. No	Bidder Eligibility Criteria-I	Complied / Not Complied	Reference Page No.	Remarks, If any
1	The bidder/OEM should have supplied at least 5 similar items to IITs, NITs, IISERs, CSIR Labs or other Govt. R&D organizations in the last 10 years, PO copies or installation certificates along with contact details of end user need to be submitted as the proof of supply. IIT Madras reserves its right to verify the claims submitted by the bidder and the feedback from the previous customers will be part of technical evaluation.			
2	Company should be registered in India for last 3 years. Proof of company registration should be enclosed.			
3	The bidder should have 5 Crores turnover in any one of the last 3 Financial Year.			

Technical Specifications II

The instrument facilitates quick and effective collect micron sized samples characteristics - physical and chemical to characterize compound distributions and physical properties from materials in complex matrices, while providing the speed, sensitivity and resolution of traditional infrared microscopy without the use of FTIR.

Specifications		Complied / Not Complied	Reference Page No.
FTIR General Parameters	Spectral range MID IR: 7500 – 450 cm-1 or better Dynamically Aligned Interferometer Mid IR and Far IR range beam splitter 10 years warranty Laser He-Ne laser sources with 10 years warranty		
Imaging/Mapping	FTIR imaging system should have Transmission, Reflectance, and ATR imaging modes. High resolution color digital camera USB with 1024 × 768 low-noiseCCD. Realtime 500 µm field of view.		

Detector	DTGS (for FTIR) Single element MCT and Linear Array detector (for imaging)		
Minimum detectable size range	3 µm or less		
ATR accessory	Yes (Imaging ATR is mandatory)		
ATR crystal	Micro-Attenuated Total Reflection (ATR) with Germanium (Ge)		
Motorised stage	Automated High speed with joystick		
Automated	Yes,		
Wavelength range	7800-600cm-1		
Signal to noise @ 25 µm	Better than 500: ,		
Modes of analysis	Transmission, reflection and micro- ATR mode		
Time taken for the analysis of 1.2 x1.2mm	20 seconds or less		
Stage speed	10 steps /sec or better		
Inferometer speed	150spectra/sec or better		
Spatial Resolution	25 um or better		
Spectral resolution	16cm-1 or better		
Libraries	Licensed copy with minimum10,000 General spectra & minimum 4,000 spectra for Polymer, Additives, Plasticizers libraries FTIR spectra should be supply along with instrument. Nopirated libraries will be accepted. Library upgradation should also be providedfor5years after installation free of cost.		
Other Accesories	All the pre requisition for installation like Branded PC of suitable configurationalongwith 2 nos. of 27” inch monitor, laser printer, required UPS etc. shouldbesuppliedalong with system		