



INDIAN INSTITUTE OF technology BANARAS HINDU UNIVERSITY

भैषजकीय अभियांत्रिकी एवं प्रौद्योगिकी विभाग

No. IIT(BHU)/PH/2022-23/

Department of Pharmaceutical Engineering & Technology

Dated: 09.06.2023

CORRIGENDUM-1

Tender Reference No.: IIT(BHU)/PH/FY/2023-24/QTN/M/10 Dated: 31.05.2023

Procurement of Fourier Transmission Infrared Spectrometer with monolithic Diamond ATR and Transmission module: 1 complete Unit

SI. No.	Tender Terms/ Specifications For	Modified Tender Terms/ Specifications Read				
110.	Section 8: Annexure 1 Page No 36, SCHEDULE OF REQUIREMENTS					
1.	At Page No.: 36, Se. No.: 1 For 'It must be capable to analyze both solid and liquid samples'	At Page No.: 36, Se. No.: 1 Read 'It must be capable to analyze both solid, liquid samples, paste and gel'				
2.	At Page No.: 36, Se. No.: 4 For '2 cm ⁻¹ or better'	At Page No.: 36, Se. No.: 4 Read '1 cm ⁻¹ or better'				
3.	At Page No.: 36, Se. No.: 6 For 'Beam Splitter should be of ZnSe.'	At Page No.: 36, Se. No.: 6 Read 'Beam Splitter should be of ZnSe / KBr'				
4.	At Page No.: 36, Se. No.: 11 For 'Solid state laser'	At Page No.: 36, Se. No.: 11 Read 'Solid state laser / Diode laser'				
5.	At Page No.: 36, Se. No.: 14 For 'Optics should be completely sealed and desiccated enclosure with life indicator'	desiccated enclosure with minimum of 10 years warranty'				
6.	At Page No.: 36, Se. No.: 16 For 'Instrument should have future upgradability for instruments like microscopy, imaging, and Gas chromatography etc'	At Page No.: 36, Se. No.: 16 Read 'Instrument should have future upgradability'				
-	Section 8: Annexure II Page No 38, TECHNICAL COMPLIANCE STATEMENT					
7.	At Page No.: 38, Se. No.: 1 For 'It must be capable to analyze both solid and liquid samples'	At Page No.: 38, Se. No.: 1 Read 'It must be capable to analyze both solid, liquid samples, paste and gel'				
8.	At Page No.: 38, Se. No.: 4 For '2 cm ⁻¹ or better'	At Page No.: 38, Se. No.: 4 Read '1 cm ⁻¹ or better'				
9.	At Page No.: 38, Se. No.: 6 For 'Beam Splitter should be of ZnSe.'	At Page No.: 38, Se. No.: 6 Read 'Beam Splitter should be of ZnSe / KBr'				
10.	At Page No : 38 Se No.: 11	At Page No.: 38, Se. No.: 11 Read 'Solid state laser / Diode laser'				
11.	At Page No.: 38, Se. No.: 14At Page No.: 38, Se. No.: 14For 'Optics should be completely sealed and desiccated enclosure with life indicator'At Page No.: 38, Se. No.: 14Read 'Optics should be completely sealed desiccated enclosure with life indicator'Read 'Optics should be completely sealed desiccated enclosure with minimum of 10 warranty'					
12	At Page No.: 38, Se. No.: 16 For 'Instrument should have future upgradability for instruments like microscopy, imaging, and Gas chromatography etc'	upgradability'				

All other contents of the aforementioned tender document shall remain unchanged.

S-Hemalatha ११७२३ Head of the Department ११७२३ विभागस्थि/ Head

भैषजकीय अभियांत्रिकी एवं प्रौद्योगिकी विभासीरतीय प्रौद्योगिकी संस्थान(का.हि.वि.) वाराणसी - 221005 भारत Department of Pharmaceutical Engineering & Technology भारतीय प्रौद्योगिकी संस्थान/INDIANINSTITUTE OF TECHNOLOGIA Institute of Technology (BHU) Varanasi-221005 India ्यरागव आधाप्रथा प्रथान/ Indianastrior Louriou Englishing Email: head.phe@itbhu.ac.in;Web: iitbhu.ac.in



SECTION 8

REVISED SCHEDULE OF REQUIREMENTS

TECHNICAL SPECIFICATIONS: Fourier Transmission Infrared Spectrometer with monolithic Diamond ATR and Transmission module

Diamond ATR and Transmission module						
Sl.	Specification	Bid Requirement				
No.	Name					
1		Infrared Spectrometer with monolithic Diamond ATR and Transmission				
	module					
2		analyze both solid, liquid samples, paste and gel				
3	Wavelength Range	5000 cm^{-1} to 600 cm^{-1} or better				
4	Spectral resolution	1 cm ⁻¹ or better				
5	Wave number	0.06 cm^{-1} or better				
	accuracy					
6	Beam Splitter	Beam Splitter should be of ZnSe / KBr				
7	Detector	DTGS/ DLaTGS Detector				
8	Source	Mid IR Source				
9	Peak-to-Noise ratio	30,000:1 for 1-minute scan at 4 cm ⁻¹ or better				
10	Interferometer					
		alignment changes				
11	Reference laser	Solid state laser / Diode laser				
12	Validation	Software controlled validation				
13	Operating Range	10 - 45° C				
14	Optical system	Optics should be completely sealed and desiccated enclosure with minimum				
		of 10 years warranty.				
15	Software	Latest version of single software platform (Windows based) for all functions				
		required for infrared analyses; instrument control,				
		data manipulation and analysis, and flexible report utilities.				
16	Instrument should ha	ve future upgradability				
17	Instrument should	be supplied with following accessories:				
		a. Reflection analysis ATR with Diamond crystal for solid and liquid protein				
		and nanomaterials.				
		b. Sealing press, KBr powder, sample holder, mortal -pestle and other items				
		required for pellet making.				
		c. Genuine & OEM Spectral Libraries of minimum 10,000 compounds				
		including common organic compounds, polymer, minerals, drugs etc.				
		d. Should be supplied with Suitable branded computer (i7, 8 GB RAM, 1 TB				
		HDD, 22 inch LED monitor), printer & online ups with 15 minutes back up,				
10		transmission analysis.				
18	Warranty and	3 years complete warranty on entire system $+ 2$ years free AMC 5-10 years:				
	other requirements	On Interferometer, Laser source and IR source				
_		2-3 days training to the users twice after installation				
		Supplier must submit authentic documents to prove their claim in meeting or				
		deviating tender specification. Website link should also be provided to				
		support the claim.				
		Financial bid of the technically qualified vendor will be opened only after				
		successful demonstration if institute wish to do so.				
		Minimum 10 performance certificate/installation report in IITs/NITs/ Central				
		Govt. Institutions / Central Universities should be enclosed.				

Note- Only those bidders who will quote rates of all the items will be consider for evaluation. Lowest bidder will be decided on overall L1 basis.

REVISED TECHNICAL COMPLIANCE STATEMENT

Tender for Fourier Transmission Infrared Spectrometer with monolithic Diamond ATR and Transmission module

Sl. No.	Specification Name	Bid Requirement	Whether the instrument complies with the required specification (Yes/No/ Better)	
1	Fourier Transmission Infrared Spectrometer with monolithic Diamond ATR and Transmission module			
2	It must be capable to analyze both solid, liquid samples, paste and gel			
3	Wavelength Range	5000 cm^{-1} to 600 cm^{-1} or better		
4	Spectral resolution	1 cm ⁻¹ or better		
5	Wave number accuracy	0.06 cm ⁻¹ or better		
6	Beam Splitter	Beam Splitter should be of ZnSe / KBr		
7	Detector	DTGS/ DLaTGS Detector		
8	Source	Mid IR Source		
9	Peak-to-Noise ratio	30,000:1 for 1-minute scan at 4 cm ⁻¹ or better		
10	Interferometer	Michelson interferometer, High stability, self- compensating for dynamic alignment changes		
11	Reference laser	Solid state laser / Diode laser		
12	Validation	Software controlled validation		
13	Operating Range	10 - 45° C		
14	Optical system	Optics should be completely sealed and desiccated enclosure with minimum of 10 years warranty.		
15	Software	Latest version of single software platform (Windows based) for all functions required for infrared analyses; instrument control, data manipulation and analysis, and flexible report utilities.		
16	Instrument should have future			
10		ed with following accessories:		
17	Instrument should be supplied	a. Reflection analysis ATR with Diamond crystal		
		for solid and liquid protein and nanomaterials.		
		b. Sealing press, KBr powder, sample holder,		
		mortal -pestle and other items required for pellet making.		
		c. Genuine & OEM Spectral Libraries of minimum 10,000 compounds including common organic		
		compounds, polymer, minerals, drugs etc. d. Should be supplied with Suitable branded computer (i7, 8 GB RAM, 1 TB HDD, 22 inch LED monitor), printer & online ups with 15 minutes back up, transmission analysis.		
18	Warranty and other requirements	3 years complete warranty on entire system + 2 years free AMC 5-10 years: On Interferometer, Laser source and IR source		
		2-3 days training to the users twice after installationSupplier must submit authentic documents to prove		
		their claim in meeting or deviating tender specification. Website link should also be provided to support the claim.		
		Financial bid of the technically qualified vendor will be opened only after successful demonstration if institute wish to do so.		
		Minimum 10 performance certificate/installation report in IITs/NITs/ Central Govt. Institutions / Central Universities should be enclosed.		

The above compliance statement form is only indicative and can be modified according to requirements of the bidder.