

Republic of the Philippines  
**University of the Philippines Mindanao**  
Mintal, Tugbok District, Davao City

22 July 2022

**BID BULLETIN NO. 01**  
**SUPPLY OF LABORATORY EQUIPMENT FOR**  
**THE IMPLEMENTATION OF TTBD0 AUGMENTATION PROJECT**  
**PBM 2022-13**

This Bid Bulletin is issued for the following:

Revisions in the **DELIVERY SCHEDULE & TECHNICAL SPECIFICATIONS.**  
Please refer to the attached Revised Schedule of Requirements and Technical Specifications.

For guidance of all concerned.

  
**PROF. CLETO L. NAÑOLA JR.**  
Chair, Bids and Awards Committee for Goods

Received by the bidder:

\_\_\_\_\_  
Signature over printed name/Date received

## Section VI. Schedule of Requirements

The delivery schedule expressed as weeks/months stipulates hereafter a delivery date, which is the date of delivery to the project site.

Item Number	Description	Quantity	Total	Delivered, Weeks/Months
<b>1</b>	<b>Fourier Transform Infrared Spectrophotometer</b>	<b>1</b>	<b>1,800,000.00</b>	<b>120 days maximum, preferably much earlier around 60-90 days</b>
	Warranty: 1 year or 15 months upon acceptance			
	Spare Parts: Atleast 10 years availability of spare parts			
	Must have one service Engr. Based in Davao City			
	With 1-3 person free training at manufacturer facility			
	Free installation			
<b>2</b>	<b>Jacketed Glass Hydrothermal Polymerization Reactor</b>	<b>1</b>	<b>400,000.00</b>	<b>120 days maximum, preferably much earlier around 60-90 days</b>
	Warranty: 1 year upon acceptance			
	Spare Parts: At least 5 years availability of spare parts			
	Free installation			

## TECHNICAL SPECIFICATIONS

Item	Specification	Statement of Compliance	
<b>FOURIER TRANSFORM INFRARED SPECTROPHOTOMETER</b>	<b>Interferometer:</b>	Michelson interferometer (30°C incident angle)	
		Equipped with dynamic alignment system	
	<b>Optical System:</b>	Single Beam Sealed interferometer with desiccant	
	<b>Beam Splitter:</b>	Germanium-coated KBr	
	<b>Light source::</b>	High-energy ceramic Light source with 3 yrs. guaranteed	
	<b>Detector:</b>	DLATGS detector equipped with temperature control mechanism	
	<b>Wavenumber range:</b>	7800 to 350cm <sup>-1</sup>	
	<b>Wavelength Accuracy:</b>	+0.1 cm <sup>-1</sup>	
	<b>Resolution:</b>	0.9,2,4,8, or 16 cm <sup>-1</sup>	
	<b>S/N Ratio:</b>	30,000:1 (Peak to peak, 4cm <sup>-1</sup> resolution, around 2,100cm <sup>-1</sup> , 1 min integration)	
	<b>Mirror Speed:</b>	2.8mm/sec or better	
	<b>Data Sampling:</b>	Semiconductor laser with temperature control	
	<b>Sample compartment:</b>	Equipped with automatic accessory recognition mechanism	
	<b>Accessories:</b>		
<b>QATR Single Bound Diamond ATR for FTIR</b>	Extended wavelength capability from 10,000 to 40 wavenumber		

		High spectral quality and high throughput capability	
		Strong and durable monolithic diamond	
	<b>Sealed Liquid Cell with KBr Windows</b>	Capable of Handling liquid samples	
	<b>Spectral Library</b>	Spectral Signatures of chemicals, drugs, forensics	
	<b>UPS</b>	3KVA or better	
	<b>Computer Control System</b>	1 set Branded computer with inkjet printer	
<b>JACKETED GLASS HYDROTHERMAL POLYMERIZATION REACTOR 5L</b>	<b>Capacity:</b>	5L Volume Capacity	
		With built-in Vacuum meter	
		Explosion-proof Reaction Flask	
		With customizable volume (condenser + receiving flask)	
	<b>Reflux unit:</b>	Durable explosion proof induction motor	
		Intelligent Control Panel with Digital Display	
		Rugged steel reinforced PTFE agitator	
		Zero dead space detachable drain valve (PTFE) with knob to easily open and close	
		Heavy-duty lockable casters, easy to move around and with high stability with lock	
		Heavy-duty stainless steel frame	
		Dual Jacketed model	
		Solvent resistant	

		Glassware are heat/cold/corrosion resistant	
		Preferably Quartz Glass material for high temperature resistance	
		Adjustable stirring rate	
		Wide range of temperature operation of up to 200°C	
		Capable of Oil Circulation Heating	
		Large condenser cooling	
	<b>ACCESSORIES</b>	Circulating Water/Oil Bath or Heater capable of heating up to 200°C	
		Vacuum Pump	
		Recirculating Chiller for low temperature setup	