Madan Bhandari University of Science and Technology Development Board (MBUSTB) Setopati, Lalitpur Metropolitan City Ward 18, Nepal Date: December 21, 2021

Clarification No. 1

This is to notify all concerned that MBUSTB, Setopati, Lalitpur, Nepal has made following clarifications on the queries of the bidders regarding the bidding Document for the Supply, Delivery, Installation, Testing and Commissioning of Laboratory Equipment, Contract ID IFB No. MBUSTDB/G/NCB-01.02/2078/79 (Chemistry Equipment), published in the Kantipur national daily newspaper and <u>www.bolpatra.gov.np/egp</u> on November 19, 2021, Friday (Mangsir 03, 2078).

No.	Reference of Biding Document	Query from the Bidder	Response from the Purchaser
1	Technical Specification, Item No.1: Fourier Transform Infrared Spectroscopy (FTIR)	Request for Amendment 600-5100 cm ⁻¹ or more. This range is sufficient. KBR has a higher range 350-7000 cm ⁻¹ , however KBR is hygroscopic in nature and very risky from the moisture. Having ZnSe it is safe and risk free from Moisture. Thus requested for spectral range 600-5100 cm ⁻¹ or more.	ZnSe as a extra accessories will be used in case of any corrosion or damage to diamond ATR.
		List of optional Spare Parts Diamond/ZnSe ATR crystal kit Diamond/ZnSe ATR . ATR crystal kit is a specific to a vendor.	ATR is not specific to single vendor. but leading manufacturers do have the option.
		KBr or CaF glass slide for calibration, if necessary KBr or CaF glass slide for calibration. Our system doesn't need KBr or CaF glass slide	Specifications have been revised. Please refer to Addendum Notice No. 2.
		Request to amend specifications for Supply, Delivery, Installation and Commissioning of Bench top FTIR As per our experience, we would request your esteemed organization to elaborate the tender specifications of FTIR Spectrophotometer and also include supporting items which are essential to operate these equipment.	Specifications have been revised. Please refer to Addendum Notice No. 2.
2	Technical Specification , Item No.2: UV-Visible Spectrophotometer	D2 and halogen. Our system doesn't need D2 and halogen, uses Xenon flash lamp for entire 190- 1100nm range. Lamp life is guaranteed for 5 Yrs where as D2 and Halogen has self-life of less than	Specifications have been revised. Please refer to Addendum Notice No. 2.

No.	Reference of Biding Document	Query from the Bidder	Response from the Purchaser
		2000 Hrs. PC and PC Software for UV-VIS System	
		Better analysis with PC connection and save data in PC system.	
		Technical Specification for UV-VIS	
		spectrophotometer	
		speed opnotonieter	
		The bidders are requested to fill up full technical	
		specification of offered products rather than just	Specifications have been revised. Please refer
		quoting fully complied/Yes complies. The Statement	to Addendum Notice No. 2.
		of Compliance must be substantiated with	
		authenticated catalogue/data sheet/ manual with the	
		page number of original catalogue/datasheet/manual	
		of the relevant parameters indicated. Heating bath volume ≥ 18 - 22ltr. Since we have a	
	Technical Specification, Item	powerful heater of 3600 W we do not	
3	No.3: Large Scale Rotary		Specifications have been revised. Please refer
C	Vacuum Evaporator	need much water bath capacity. This also avoids	to Addendum Notice No. 2.
	L L	wastage	
		Built in Vacuum Controller/ Digital controller based	
		rotation and temperature with motorized lift for	
		height adjustment and safety function for heater,	
		water flow and drainage. Vacuum can be controlled	Specifications have been revised. Please refer
		and visualize with our Vacuum interface with in built vacuum valve. Vacuum controller can be	to Addendum Notice No. 2.
		mounted on the vacuum pump itself. Touch screen	
		module for controlling the function like heating,	
		rotation and lift movement with real time status	
	Technical Specification, Item	Vacuum < 5 mbar. Lower the vacuum better is the	
4	No.4: Small Scale Rotary	distillation. Pump flow capacity > 9 ltr/min.	Specifications have been revised. Please refer
т	Vacuum Evaporator		to Addendum Notice No. 2.
	··· r · ····	Ending a llada ing ang 1,10 day 1	
		Fraction collector is recommended for automated system instead a manual. Also, Fraction collector is	Fraction collector is capable of time based
5	Technical Specification, Item No.	an accessory, it also needs the pump with defined	collection from open column chromatography.
	5: Fraction Collector	flow rate and Detector. The specification doesn't	Therefore, a modest system, which does not
		have mentioned about the pump and Detector.	require flow rate and detector, would be acceptable.
		Please mention the details.	

No.	Reference of Biding Document	Query from the Bidder	Response from the Purchaser
6	Technical Specification, Item No.6: Soxhlet Apparatus	Item No. 6 Soxhlet Apparatus is a manual system, recommended for 6-8 place automated system with automatic system. The specification is too general that can meet any Indian & Chinese brand.	Soxhlet Apparatus manual system with single heating mantle is acceptable.
7	Technical Specification, Item No.7: Polarimeter	Item No. 7 Polarimeter - Optical rotation 89.9° recommendable instead 45°C and resolution 0.001°, wavelength 589nm with PT100 sensor for sample temperature measurement.	Specifications have been revised. Please refer to Addendum Notice No. 2.
8	Technical Specification, Item No.9: Freeze dryer	Collection temperature -50 °C or below. Lower the temperature better is the trapping efficiency	Collection temperature -40 °C or below already covers the vendors specification range.
		Ice holding Capacity >6Ltr. With higher ice holding capacity more sample volume can be loaded	Ice holding Capacity >5 Ltr already covers the vendors specification range.
		Water removal capacity > 6ltr / 24hr. With higher efficiency freeze drying process will be faster	Water removal capacity > 4ltr / 24hr already covers the vendors specification range.
		List of optional accessories Single stage cooling system.	Specifications mention either single stange or two stange cooling system in the specification so the single stange quotation will also be acceptable.

Prof. Rajendra Dhoj Joshi Chairperson Date: December 21, 2021