

## **MAHATMA GANDHI UNIVERSITY**

Tender No. School of Energy Materials/e-TENDER/2/2020

## **NOTICE INVITING TENDER**

Dated: 18/12/2020

(Tender No School of Energy Studies/e-TENDER/2/2020)

The Registrar, Mahatma Gandhi University, Kottayam for and on behalf of Director, School of Energy Materials, Mahatma Gandhi University invites online bid (technical and financial bid) for Supply and Installation of Various Equipments under the project Development of Polymer Based Solar Cell from reputed firms. The period of the tender is 180 days from the date of tender.

1	Tender Title	Supply and Installation of Various Equipments under the project Development of Polymer Based Solar Cell			
2	Earnest money deposit (EMD)	Rs. 10,000 /-			
3	Tender submission fee	Rs. 1500 + GST (0.2 % of the cost of tender rounded to the nearest multiple of 100, subject to a minimum of 400/- and a maximum of 1500/- + VAT as per store purchase rules)			
4	Period of supply and installation	Within 15 days from the L/C opening date			
5	Mode of submission of Bid	Online			
6	Tender Documents	Can be downloaded from the website www.etenders.kerala.gov.in			
7	Last date and Time of submission of tender by online	01/01/2021 4 PM			
8	Date and time of opening of technical bid	04/01/2021 ,10AM			

General tender documents and tender schedule can be downloaded in A<sub>4</sub> plain size paper free of cost from the website www.etenders.kerala.gov.in.

Documents to be submitted along with bid through online:

S1.	Through online
No	
1	Scanned copy of duly filled e-payment form
2	Scanned Copy of duly filled preliminary Agreement in stamp paper of Rs.200/-
3	BOQ
4	Scanned copy of other certificates required, if any, for tender acceptance
5	Scanned copy of valid registration certificate/dealership certificate

**Special Conditions** 

1. Onsite training has to be arranged by the vendor. Training should include operation, software

applications, analysis, handling and maintenance of system.

2. List of Indian and abroad users for quoted model.

3. Laboratory floor space, electrical power requirements, earthing, room temperature/ humidity

requirements etc. should be mentioned appropriately.

4. Complete set of service and operation manuals for diagnosis, trouble shooting, maintenance and

electronic circuitry (soft copies).

5. The Delivery Schedule, Payment Terms & Warranty/Guarantee etc must be clearly indicated in

the technical bid.

6. Details AMC and calibration of the instrument.

7. All party are advice to quote their latest and higher version instrument with declaration of

technical and spare and consumable backup more than 15 Years

8. Date of launching of quoted model.

9. The quoted price in BOQ should include all Taxes, GST, Shipping, Customs/Excise duty exempted

price, installation, training charges, etc

10. Warranty should be quoted in the technical bid for all equipments.

The bids shall be opened at the date and time specified. Further details can be had from the office of

The Director, School of Energy Materials, Mahatma Gandhi University, Kottayam, Kerala-686560 on all

working days during working hours. Contact No.7907977308 email: <a href="mailto:sabuthomas@mgu.ac.in">sabuthomas@mgu.ac.in</a>.

The bidders are advised to submit their bid well in advance to avoid any kind of network issues.

The undersigned reserves the right to reject any or all the tender without assigning any reason

whatsoever.

Assistant Registrar(V) Admn

**For Registrar** 

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## Specifications

Sl.	Name of the	Specification	Quant
No 01	Equipment Vacuum	47MM Vacuum Filter Unit (Glass) manufactured in borosilicate glass. It	ity 1
	filtration unit	includes the following; Sintered and even glass support for membrane filter, A graduated glass funnel with 300ml to 1000ml capacity, An anodized metal clamp, A silicon funnel cover with a central hole and a filtering flask of 300ml-2 litre capacity. Oil free vacuum pump,	
02	3.7	Warranty: 2 Year	1
02	Magnetic Stirrer with hot plate.	<ol> <li>A Magnetic stirrer with hot plate having maximum temperature not less than 500°C.</li> <li>Dimensions (WxHxD) ≈ 220x105x330 mm.</li> <li>Exact temperature setting via digital display.</li> <li>Powerful motor for stirring quantities up to 10 litres of water.</li> <li>Speed range: 100-500 rpm</li> <li>Warranty: 3 Year</li> </ol>	1
03	Electronic	Max. Weighing capacity: 60 -320 g	1
	Balance	Readability: 0.0001g Linearity: 0.001g - 0.004 g Operating temperature: 15 - 40'C Temperature sensitivity drift: -2°C Weighing platform dimensions: 80 - 100 mm Weight of Balance: 4.5 - 6kg Digital display, Internal calibration capacity, Corrosive resistant body and weighing pan Warranty: 3 Year	
04	Table Top Spin Coating System	Maximum Sample Size: 150 mm (Circular), or 125mm (Square) Minimum Sample Size: The offered spin coater should be equipped in order to allow spin coating on a sample as small as 3mm x 3mm. Rotation speed: From 100RPM to at least 10000RPM with stability / accuracy of 0.1% over full range.  Acceleration: At least up to 10000 RPM/Second Spin time: From 1 second to 99 minutes  Controller: Programmable with capability of storing at least 10 programs with each program having at least 25 steps.  Chamber body: Should be made of Polypropylene or other polymer resistant to chemicals. It should be easy to clean the inner side of the chamber.  Sample holder vacuum chuck: Should be suitable for holding glass, silicon, quartz as well as other metal and non-metal substrates.  Safety: The unit should have safety provision so as not to start any program, or stop any running program when the chamber lid is open.  Spill management: The unit should have provision to collect excess chemicals discarded at the time of spin coating.  Spare Parts: Provide additional O-rings to go with the vacuum chucks.  Warranty: 3 Year	1

05	Fume	1. Fume hood dimensions : $\approx$ 1200 m W x 600 mm Dx750 mm H	1
	cupboard	2. Materials of Construction: FRP/bisphinol $\approx$ 3 mm thick x 2 sides	
	with	asbopolyester resin lined FRP. Externally laminated glossy FRP sheet.	
	exhaust	3. Door: Single leaf type vertically sliding powder coated SS 304 frame ≈6	
	system	mm thick tuff glass.	
	System	4. Flooring: Polished black granite with $\approx$ 18 mm thickness. Skirting of $\approx$ 80	
		mm height on all three sides with same material.	
		5. Exhaust blower: Blower should be driven by 1HP 3 phase, TEFC type	
		motor. (Proper blower casing and ducting should be included)	
		6. Bottom arrangement: a table of height $\approx$ 750 mm made of SS 304 with less	
		than 6 cupboard and at least three shelves.	
		7. Electrical arrangements: Proper electrical arrangements for the hood	
		including CFL lamps should be provided.	
		The item should be delivered and installed at the School of Energy Materials	
		Department, Mahatma Gandhi University, Kerala	
		Warranty: 3 Year	

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