



**COMSATS University Islamabad, Lahore Campus**  
**Defence Road, Off Raiwind Road, Lahore**

Tender No. CUI-LHR-TN-13-19-1328

Case # 2538

**Single Stage Two Envelop Procedure**

**Title of Tender: Hydrogen and Oxygen Evolution from Water Splitting Assembly for IRCBM Department, CUI-Lahore Campus**

**TERMS AND CONDITIONS**

1. All pages of bidding documents are mandatory to be signed / stamped, meaning thereby bidder agrees to our terms & conditions mentioned herein, failing which the bid may be rejected.
2. Any addition, deletion or modification of any clause of the procurement terms & conditions/ BoQs of CUI Lahore Campus by any vendor will not be acceptable and may lead to rejection of the bid.
3. Only registered Suppliers, who are on Active Taxpayers List (ATL) of FBR, are eligible to participate in tender.
4. The contract will be executed and handed over in satisfactory conditions up to the entire satisfaction of COMSATS University Islamabad, Lahore Campus.
5. Documents along with Pay Order / Demand Draft amounting to **Rs. 500/-** as a tender document fee (Non-Refundable) shall be submitted in favor of COMSATS University Islamabad, Lahore Campus to the address given below. No bid will be accepted without tender documents' fee.
6. Part / Advance payments is not allowed.
7. **The exact completion/installation/ delivery time from the date of the purchase / work order will be 40 days. The handing over / completion time for this contract is of critical importance.**
8. Your bid proposal should be inclusive of freight and all other taxes and to be delivered at COMSATS University Islamabad (CUI), Lahore Campus's premises.
9. After opening of bids, CUI-Lahore Campus will examine the bids for completeness as per tender document.
10. Purchase order (s) will be awarded to the lowest or technically recommended bidder (s) on the basis of item wise / subtotal wise / grand total wise according to the nature of BoQs.
11. The bid should be submitted in a sealed envelope up to **January 01, 2020** on or before **1400hrs** and will be opened on the same date **at 1430hrs** in the presence of available bidders.
12. COMSATS University Islamabad, Lahore Campus, will follow the PPRA rule of **single stage two envelope procedure**:
  - i. The bid shall comprise a single package containing **two separate envelopes**. Each envelope shall contain separately the **financial proposal** and the **technical proposal**;
  - ii. The envelopes shall be marked as **“FINANCIAL PROPOSAL”** and **“TECHNICAL PROPOSAL”** in bold and legible letters to avoid confusion;


**Signature & Stamp of Bidder**



- iii. Initially, only the envelope marked **“TECHNICAL PROPOSAL”** shall be opened;
  - iv. The envelope marked as **“FINANCIAL PROPOSAL”** shall be retained in the custody of the procuring agency without being opened;
  - v. The procuring agency shall evaluate the technical proposal in a manner prescribed in advance, without reference to the price and reject any proposal which does not conform to the specified requirements;
  - vi. During the technical evaluation no **amendments** in the technical proposal shall be permitted;
  - vii. The financial proposals of bids shall be opened publicly at a time, date and venue announced and communicated to the bidders in advance;
  - viii. After the evaluation and approval of the technical proposal the procuring agency, shall at a time within the bid validity period, publicly open the financial proposals of the technically accepted bids only. The financial proposal of bids found technically nonresponsive shall be returned un-opened to the respective bidders;
  - ix. and
  - x. The bid found to be the lowest evaluated bid shall be accepted.
13. The envelope should be marked as under;
- Secretary, Purchase Committee**  
**COMSATS University Islamabad, Lahore Campus**  
Defence Road, Off Raiwind Road, Lahore.  
Tel: 042-111-001-007, Ext: 875
14. The envelope shall also bear the word **“CONFIDENTIAL”** and following identification quotation of **“Hydrogen and Oxygen Evolution from Water Splitting Assembly for IRCBM Department, CUI-Lahore Campus”**.
15. The bid form (BoQs) must be duly filled in, stamped and signed by the authorized representative of the bidder.
- 16. If the vendor fails to deliver the goods / services to COMSATS University Islamabad (CUI), Lahore Campus within the given deadline, any of the following can be opted by CUI Lahore campus on the recommendation of the end user and approval of the authority;**
- a. An extension in the delivery period may be granted in case a valid reason/justification with necessary documentary evidence is provided by the vendor supporting the reason for delay.
  - b. A penalty upto 10% of the invoice value may be charged.
  - c. Purchase order may be cancelled along with confiscation of earnest money if the vendor fails to deliver the goods / services after the initial or extended delivery time, as the case may be.
17. If the delivered goods / services are not according to the required quality standards / specifications, the same shall be liable to be rejected after inspection. The vendor would be required to supply as per requirements mentioned in our BoQs, otherwise the purchase / work order will be cancelled after due date with confiscation of earnest money.
18. Deduction of Income Tax and any other tax will be deducted at source according to Government prevailing rules.


19. Payment will be made on submission of Invoice in the name of “COMSATS University Islamabad (CUI), Lahore Campus” with a copy of delivery challan (s) after the complete order has been supplied, inspected and accepted which includes delivery / installation, and COMSATS acceptance / inspection thereof.
20. All prices should be valid for at least **90 days**. Withdrawal or any modification of the original offer within the validity period shall entitle CUI-Lahore Campus to forfeit the earnest money in favor of the CUI-Lahore Campus and / or put a ban on such vendor participation in tenders / works.
21. It is the sole responsibility of the agent / supplier / manufacturer to comply with the applicable laws, be national or international.
22. In case of any dispute or grievance, the matter shall be addressed as per PPRA rules.
23. The CUI-Lahore Campus reserves the right to modify the quantities of goods / services at any time before the award of purchase / work order.
24. Minimum one-year warranty shall be provided from the date of installation or standard warranty whichever is higher
25. **The bidder is required to furnish in form of Bank deposit/ CDR / Pay order equivalent to 2% of the total Bid price as Earnest Money crossed in favor of “COMSATS University Islamabad, Lahore Campus”.**
26. **CUI Lahore Campus** reserves the rights to reject the bid if;
  - i. Received without earnest money
  - ii. Received later than the date and time fixed for tender submission
  - iii. The tender is unsigned/ unstamped
  - iv. The offer is ambiguous
  - v. The offer is conditional
  - vi. The offer is from a firm, which is black listed by any Govt. Office.
  - vii. The offer is received by telephone/telex/fax/telegram.
  - viii. Any unsigned / ambiguous erasing, cutting / overwriting etc. is made.
27. The bidder should furnish a certificate as worded below in token of acceptance of all the terms and conditions of the tender otherwise the tender will not be considered under any circumstances.
28. The undersigned affirm that the terms and conditions as contained in this document have been read and accepted and that in the event of selection of my/our rate the agreement in the prescribed form will be entered into:
  - **Company / Vendor Name:**.....
  - **Postal Address:**.....
  - **Tel. / Mobile:**.....**Email:**.....
  - **NTN# :**.....**GST#:**.....
  - **Signature:** .....
  - **Please also attach the Certificate supporting being Active Taxpayer as per requirement of FBR.**

**BoQs of Hydrogen and Oxygen Evolution from Water Splitting Assembly for IRCBM Department, CUI-Lahore Campus**

***Technical Portion (Please mention the quoted model/ brand in technical portion with no mention of price otherwise the bid will be rejected)***

Sr. #	No change in the BoQs (Specs & Qty.) of CUI-Lahore Campus, as detailed below, is allowed. Any additional information may be mentioned in the blank columns (i.e. model / brand or Price). Any modification in CUI-Lahore Campus BoQ may lead to rejection of bid (fully or partially).		Rate to be quoted Inclusive of all (applicable) Taxes	
	Item Name & Specification	Qty.	Quoted Model / Brand	
01	<p><b><u>Xenon lamp for Photocatalytic hydrogen evolution</u></b></p> <ul style="list-style-type: none"> <li>• Power:300 watts</li> <li>• Adjustment: 150watts-300watts</li> <li>• Max Electric control Current:20 amps (DC)</li> <li>• Radiant Output:50 watts</li> <li>• Vis Output: 19.6 watts</li> <li>• UV Output:2.6 watts</li> <li>• Beam Geometry: 6°(average)</li> <li>• Spectrum Range: 300 – 2500 nm or better</li> <li>• Filter mode: Multistage filter</li> <li>• Spot diameter: adjustable</li> <li>• Lamp life: no less than 1000H</li> <li>• Cooling form: cooling fan with metal sink</li> </ul> <p>Configuration</p> <ul style="list-style-type: none"> <li>• Power box</li> <li>• Standard light box</li> <li>• Light path to filters</li> </ul> <p>High quality system the design is as shown in picture</p> 	1	No.	

02	<p><b>Top-illuminated photoreactor for liquid-solid phase photodegradation reactions and photochemical reaction for hydrogen evolution from water splitting:</b></p> <p><b>Technical Parameters:</b></p> <ul style="list-style-type: none"> <li>• Airtight assembly</li> <li>• Quartz material</li> <li>• Effective volume is about 100-200 ml</li> <li>• Thermostatic water-cooling jacket</li> <li>• Flange connection, sealing ring seal;</li> <li>• Air inlet and outlet;</li> <li>• Liquid and gas Sampling ports</li> <li>• 20 rubber sampling corks for liquid sampling(lower)</li> <li>• 20 rubber sampling corks for liquid sampling(upper)</li> </ul>  <p><b>Design is as shown in picture</b></p>	1	No.	
03	<p><b><u>UV cut filter</u></b> Cut off Filter for UV Light below 400 nm wavelength</p>	1	No.	
04	<p><b><u>Portable Oxygen (O<sub>2</sub>) Gas Detector</u></b> Portable Oxygen (O<sub>2</sub>) Gas Detector, Rugged, IP-66/67 highly water-resistant design, Built-in concussion-proof boot with internal vibrator alarm,, Measuring range (0-30%), C/W 3 years battery, 2 years sensor, Belt clip, test cap, hose &amp; instruction, UL classified as intrinsically safe for Hazardous location, Model GAXT-X-DL-2 or equivalent</p>	1	No.	
05	<p><b><u>PTFE sealed electrolytic cell</u></b> Body material: Quartz, Tank size: 50 x 50 x 50mm The utility model is characterized in that the utility model is a transparent quartz with four sides and is suitable for ultraviolet and visible light., Teflon cover Three electrodes (working electrode, counter electrode, reference electrode) inlet and outlet. Or equivalent. <b>Design can be seen in the attached</b></p> 	2	Nos	


06	<p><b><u>Lux Meter</u></b>  Display: Large LCD characters display, Range:  0.1~200,000Lux, 0.01~20,000Fc, Resolution: 0.1Lux /  0.01Fc Measurement speed: 2 times / second, ,Accuracy:  ±2% Units: Lux &amp; Fc, Hold function, Auto range &amp; Manual  range Auto Power OFF: After approx.15 minutes, Power  Supply: One 9V battery, Low power of battery detecting  Operating Environment: -10 to 50°C, 10%~90%RH Or  equivalent.  Similar to the picture shown above.</p> 	1	No.	
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### **Bid Evaluation Criteria**



All bids shall be evaluated in accordance with the following evaluation criteria and other terms & conditions set forth in this bidding document.

- a. The bids shall be evaluated to strictly ensure that the quoted brand/ model meet all the BoQ/ specification requirements given in the tender document for each item.
- b. In addition to the BoQ requirements, vendors must meet the vendor qualification criteria /company profile requirements (if any), as set forth in this tender document.
- c. Supporting literature of the quoted model must be attached for verification & technical evaluation of the required specification by the technical committee. In case of any clash is found between the quoted model and the supported literature may lead to rejection of bid.


**Financial Portion (Price and Brand/Model to be mention only in Financial Proposal in a separate sealed envelope) Strictly on our BoQs Form.**

<p>Vendors are required to provide both unit and total price of each item and calculations must be made carefully to avoid mistakes. However, in case, total price does not match with the unit price and quantity due to calculation error or typo error, any of the following can be opted</p> <ol style="list-style-type: none"> <li>1. The bid may be rejected on the reason of ambiguity (OR)</li> <li>2. Unit price will be considered as final and total price of the respective item will be calculated by multiplying it with the quantity required. Sub-totals and grand total will also be corrected accordingly</li> </ol>						
Sr. #	No change in the BoQs (Specs & Qty.) of CUI-Lahore Campus, as detailed below, is allowed. Any additional information may be mentioned in the blank columns (i.e. model / brand or Price). Any modification in CUI-Lahore Campus BoQ may lead to rejection of bid (fully or partially).			Rate to be quoted Inclusive of all (applicable) Taxes		
	Item Name & Specification		Qty.	Quoted Model / Brand	Unit Price (Rs.)	Total Price (Rs.)
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02	<p><b>Top-illuminated photoreactor for liquid-solid phase photodegradation reactions and photochemical reaction for hydrogen evolution from water splitting:</b></p> <p><b>Technical Parameters:</b></p> <ul style="list-style-type: none"> <li>• Airtight assembly</li> <li>• Quartz material</li> </ul>		1	No.		

**Signature & Stamp of Bidder**

	<ul style="list-style-type: none"> <li>• Effective volume is about 100-200 ml</li> <li>• Thermostatic water-cooling jacket</li> <li>• Flange connection, sealing ring seal;</li> <li>• Air inlet and outlet;</li> <li>• Liquid and gas Sampling ports</li> <li>• 20 rubber sampling corks for liquid sampling(lower)</li> <li>• 20 rubber sampling corks for liquid sampling(upper)</li> </ul>  <p><b>Design is as shown in picture</b></p>					
<p><b>03</b></p>	<p><b><u>UV cut filter</u></b> Cut off Filter for UV Light below 400 nm wavelength</p>	<p><b>1</b></p>	<p><b>No.</b></p>			
<p><b>04</b></p>	<p><b><u>Portable Oxygen (O<sub>2</sub>) Gas Detector</u></b> Portable Oxygen (O<sub>2</sub>) Gas Detector, Rugged, IP-66/67 highly water-resistant design, Built-in concussion-proof boot with internal vibrator alarm,, Measuring range (0-30%), C/W 3 years battery, 2 years sensor, Belt clip, test cap, hose &amp; instruction, UL classified as intrinsically safe for Hazardous location, Model GAXT-X-DL-2 or equivalent</p>	<p><b>1</b></p>	<p><b>No.</b></p>			
<p><b>05</b></p>	<p><b><u>PTFE sealed electrolytic cell</u></b> Body material: Quartz, Tank size: 50 x 50 x 50mm The utility model is characterized in that the utility model is a transparent quartz with four sides and is suitable for ultraviolet and visible light., Teflon cover Three electrodes (working electrode, counter electrode, reference electrode) inlet and outlet. Or equivalent.</p>  <p><b>Design can be seen in the attached</b></p>	<p><b>2</b></p>	<p><b>Nos</b></p>			



06	<p><b><u>Lux Meter</u></b>          Display: Large LCD characters display, Range: 0.1~200,000Lux, 0.01~20,000Fc, Resolution: 0.1Lux / 0.01Fc Measurement speed: 2 times / second, Accuracy: ±2% Units: Lux &amp; Fc, Hold function, Auto range &amp; Manual range Auto Power OFF: After approx.15 minutes, Power Supply: One 9V battery, Low power of battery detecting          Operating Environment: -10 to 50°C, 10%~90%RH          Or equivalent.</p> <div data-bbox="240 464 431 653" style="text-align: center;">  </div> <p>Similar to the picture shown above.</p>	1	No.			
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**Special Terms and conditions;**

- i. Please submit the technical and financial bid (rates) on our prescribed BoQs Form and clearly mention the quoted model / brands, with complete terms and conditions signed, stamped with both bids, otherwise your bid (s) may be rejected.
- ii. Vendor will be responsible for Onsite Installation & Commissioning of the delivered equipment's.
- iii. Purchase / work order (s) will be awarded on **Item wise Basis.**
- iv. Kindly attach the **Tender fee with Technical Bid** and **Bid money / CDR with Financial Bid.**
- v. **Multiple rates of an item may also lead to the rejection of bid / item.**