

**Prof. Sreenivas Jayanti**

**ProjectNo: CHE1617147MIMPSREE**

**Project Coordinator**

**Dated: 30.06.2017**

**Limited Tender No: CHE/SREE/2017/02**

**Technical Bid opening meeting on 18.07.2017 at 10:00 AM**

**Due Date: 17.07.2017, 5:00 pm**

Dear Sir/Madam,

On behalf of the Indian Institute of Technology Madras, offers are invited for the supply of **BATTERY TEST STATION WITH INBUILT EIS** conforming to the specifications given in (Annexure-I).

**Instructions to the Bidder**

**(i) Preparation of Bids:** - The Limited Tender should be submitted under two-bid system (i.e.) Technical bid and Financial bid.

**(ii) Delivery of the tender:** - The tender shall be sent to the below-mentioned address either by post or by courier so as to reach the following address before the due date and time specified in our Schedule:

**DEPT OF CHEMICAL ENGINEERING OFFICE**

**Attn: Prof. Sreenivas Jayanti**

**INDIAN INSTITUTE OF TECHNOLOGY MADRAS**

**CHENNAI - 600036 TAMIL NADU INDIA**

**(iii) Opening of the tender:** - The offer/bids will be opened by a committee duly constituted for this purpose. The technical bid will be opened first and will be examined by a technical committee which will decide the suitability of the bid as per our specifications and requirements. The bidders if interested may participate on the above mentioned tender opening date and time. In respect of opening of financial bid, those bidders who are technically qualified only will be called for.

**(iv) Prices:** - The price should be quoted in net per unit (after breakup) and must include all packing and delivery charges to various Departments/Centers/Institutions. The offer/bid

should be exclusive of taxes and duties, which will be paid by the purchaser as applicable. However the percentage of tax & duties should be clearly indicated.

The price should be quoted without custom duty and excise duty, since I.I.T. Madras is exempted from payment of excise duty, and the custom duty will be paid at concessional rate against duty exemption certificate.

In case of import supply, the price should be quoted on EX-WORKS and CIP basis indicating the mode of shipment.

**(v) Agency Commission:** - Agency commission, if any, will be paid to the Indian agents in Rupees on receipt of the equipment and after satisfactory installation. Agency commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in Tender even in the case of 'Nil' commission. The tenderer should indicate the percentage of agency commission to be paid to the Indian agent. The foreign Principal should indicate about the percentage of payment and it should be included in the originally quoted basic price, if any.

**(vi) Terms of Delivery:** - The item should be supplied to our Departments as per Purchase Order. In case of import supply, the item should be delivered at the cost of the supplier to our Institution. The Installation/Commissioning should be completed as specified in our important conditions.

**(vii) Technical Bid Opening:** The technical bid will be opened on 18<sup>th</sup> July 2017 at 10 AM at the Conference room, Department of Chemical Engineering, IIT Madras and the financial bids of those tenders who are technically qualified will be opened at a later date under intimation to them.

**(viii)** IIT Madras reserves the full right to accept / reject any tender at stage without assigning any reason.

Yours sincerely,

## SCHEDULE

### Important Conditions of the tender

1. The due date for the submission of the tender is **17.07.2017, 5:00 PM.**

2. The offers / bids should be submitted in two bids systems (i.e.) Technical bid and Financial bid. The Technical bid should consist of all technical details / specifications only. The Financial bid should indicate item-wise price for each item and it should contain all Commercial Terms and Conditions including Taxes, transportation, packing & forwarding, installation, guarantee, payment terms, pricing terms etc. The Technical bid and Financial bid should be put in separate covers and sealed. Both the sealed covers should be put in a bigger cover. The Limited Tender for supply of **“BATTERY TEST STATION WITH INBUILT EIS”** should be written on the left side of the outer bigger cover and sealed.

3. **EMD:** - EMD should be at 2% (two percent) of the tender value quoted by the bidder. **The EMD should be included in the Financial bid which will not be opened for Technical evaluation. Enclosing the EMD in the Technical bid will automatically disqualify the tenderer.** EMD should be in the form of DD in favor of “The Registrar, Indian Institute of Technology Madras” and payable at Chennai. The tender without EMD would be considered as UNRESPONSIVE and REJECTED. Photo/FAX copies of the Demand Draft/Banker’s pay orders will not be accepted. No interest will be paid for the EMD and the EMD (Bid Security) will be refunded to the successful bidder on receipt of Performance Security.

4. **Performance Security:** - The successful bidder should submit Performance Security for an amount of 5% of the value of the contract/supply. The Performance Security may be furnished in the form of an Account Payee DD, FD Receipt from the commercial bank, Bank Guarantee from any nationalized bank of India will be an acceptable.

**Only after submission of Performance Security, Purchase Order/Work Order will be released / L.C will be opened.**

**Performance Security in the form of Bank Guarantee:** - In case the successful bidder wishes to submit Performance Security in the form of Bank Guarantee, the Bank Guarantee should be routed through the Beneficiary Bank to the end user bank. Otherwise, the Indian Agent of the foreign vendor has to submit a Bank Guarantee from a Nationalized Bank of India.

The Bank Guarantee should remain valid for a period of sixty days beyond the date of completion of all contractual obligations of the supplier including the warranty obligations.

5. If an Indian agent is involved, the following documents must be enclosed:

Foreign principal’s proforma invoice indicating the commission payable to the Indian Agent and nature of after-sales service to be rendered by the Indian Agent.

- ✓ Copy of the agency agreement with the foreign principal and the precise relationship between them and their mutual interest in the business.
- ✓ The enlistment of the Indian agent with Director General of Supplies & Disposals under the Compulsory Registration Scheme of Ministry of Finance.

6. The offer/bids should be sent only for a machine that is available in the market and supplied to a number of customers (renowned research/academic institutes in India and abroad). A list of customers in India and abroad with details must accompany the quotations. The bidder should have supplied at least one renowned research/academic institute in India. Quotations for a prototype machine will not be accepted.

7. Original catalogue (not any photocopy) of the quoted model duly signed by the principals must accompany the quotation in the Technical bid. No prices should ever be included in the Technical bid.

8. Documentary proof for the claimed position and repetition accuracies must be obtained from the principals and submitted along with the relevant pages of the standards.

9. Compliance or Confirmation report with reference to the specifications and other terms & conditions should also be obtained from the principal.

**10. Validity:** - Validity of Quotation not less than 90 days from the due date of tender.

**11. Delivery Schedule:** - The tenderer should indicate clearly the time required for delivery of the item. In case there is any deviation in the delivery schedule, liquidated damages clause will be enforced or penalty for the delayed supply period will be levied.

**12. Risk Purchase Clause:** - In the event of failure of supply of the item/equipment within the stipulated delivery schedule, the purchaser has all the right to purchase the item/equipment from other sources on the total risk of the supplier under risk purchase clause.

**13. Payment:** - No Advance payment will be made for Indigenous purchase. However 90% Payment against Delivery and 10% after installation are agreed to wherever the installation is involved. In case of import supplies the payment will be made only through 100% Letter of Credit i.e. (90% payment will be released against shipping documents and 10% after successful installation wherever the installation is being done). The chemicals and testing kits should be delivered depends on our indent for next three years but the payment will be made completely. The supplier should deliver the testing kits with the same cost for at least 20 months form the date of payment.

**14. Advance Payment:** - No advance payment is generally admissible. In case of specific percentage of advance payment is required, the Foreign Vendor has to submit a Bank Guarantee equal to the amount of advance payment and it should be routed through the Beneficiary Bank to the end user Bank. Otherwise, the Indian Agent of the foreign vendor has to submit a Bank Guarantee through a Nationalized Bank of India.

**15. On-site Installation:** - The equipment or machinery has to be installed or commissioned by the successful bidder within 15 to 20 days from the date of receipt of the item at site of IIT Madras. Installation should be done by the successful bidder in free of cost. All the water quality parameters

should be tested during the installation using the supplied equipments and the test result should approximately matches the result from other laboratory equipments.

**16. Warranty/Guarantee:** - The offer should clearly specify the warranty or guarantee period for the machinery/equipment. Any extended warranty offered for the same has to be mentioned separately. (For more details please refer our Technical Specifications). At least one year warranty from the date of installation.

**17. Late offer:** - The offers received after the due date and time will not be considered. The Institute shall not be responsible for the late receipt of Tender on account of Postal, Courier or any other delay.

**18. Acceptance and Rejection:** - I.I.T. Madras has the right to accept the whole or any part of the Tender or portion of the quantity offered or reject it in full without assigning any reason.

**19.** Do not quote the optional items or additional items unless otherwise mentioned in the Tender documents / Specifications.

**20. Disputes and Jurisdiction:** - Any legal disputes arising out of any breach of contract pertaining to this tender shall be settled in the court of competent jurisdiction located within the city of Chennai in Tamil Nadu.

**21.** All Amendments, time extension, clarifications etc., will be uploaded on the website only and will not be published in newspapers. Bidders should regularly visit the above website to keep themselves updated. No extension in the bid due date/ time shall be considered on account of delay in receipt of any document by mail.

**Acknowledgement:** - It is hereby acknowledged that the tenderer has gone through all the conditions mentioned above and agrees to abide by them.

**SIGNATURE OF TENDERER  
ALONG WITH SEAL OF THE  
COMPANY WITH DATE**

**Technical Bid opening meeting on 18.07.2017 at 10 AM (please refer point No. vii)**

**DEPARTMENT OF CHEMICAL ENGINEERING**

**Indian Institute of Technology Madras, Chennai – 600036.**

**Technical Specification for BATTERY TEST STATION WITH INBUILT EIS**

Full featured battery life cycle test system to perform charge/discharge cycles at Constant Current mode, Constant Voltage mode & Constant power mode

<b>Test parameters</b>	<b>Value</b>	<b>Remarks</b>
Number of channels	3	Minimum
Current per channel	10 A	Minimum
Total Current	Option A: 60 A	Minimum
	Option B: 100 A	Minimum
Voltage	9 V	Minimum
Number of Charge/Discharge cycles	1000	Minimum
Impedance	10 mHz- 10 kHz	Required range

- Voltage resolution: in the range of 10-100  $\mu$ V
- Current resolution: in the range of 50 nA
- Inbuilt temperature measurement in the range: -50 °C to 150 °C
- EIS facility: Required for all channels in the mentioned frequency range.
- Testing for singles cells to zero volts
- With automatic and programmable control for the entire system
- With automatic switching between charge and discharge
- With integrated software for automatic measurement, monitoring, data logging, display and control of all parameters.
- With minimum data acquisition speed at 10 samples / second
- Safety functions for over charging, over discharging and overheating. In the event of power failure, the instrument should continue from the point where power failure occurred on resumption of the power
- Testing cabinet should be of roller wheeled if it is not a bench top setup
- Warranty: Quote for extended warranty of up to 3 years