



**NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA – 769 008, ODISHA**

Advertised Tender Enquiry

Department: Mechanical Engineering

Tender notification no: NITR/PW/ME/2021/241

Date: 11/02/2021

To

Bidding through
e-Procurement module of
CPP Portal.

<https://eprocure.gov.in/eprocure/app>

Important Dates

Event	Date	Time
Pre-bid Conference	NA	NA
Last Date of submission of bid	10/03/2021	03:00 PM
Date of opening of techno-commercial bid	12/03/2021	03:00 PM

Dear Sir,

We intend to purchase the commodities specified below and invite quotations in accordance with the terms and conditions detailed in the bid document. If you are interested, kindly send your offer with prices and complete terms within the time mentioned above.

For any query, you may contact:

ATTENTION:
Prof. S. Murugan
Department of Mechanical Engineering
National Institute of Technology Rourkela
Rourkela-769 008, Odisha
Phone: 0661-2462525
Mobile: +91 9437140949
E-mail: murugans@nitrkl.ac.in
recmurugan@gmail.com

Yours sincerely,

Name: Prof. S. Murugan
Department of Mechanical Engineering
NIT Rourkela

Encl:

- (1) Schedule of requirement, specifications, dates etc.**
- (2) Bid document containing detail terms and conditions.**

1. Schedule of requirements

Item No	DESCRIPTION	Quantity
1	Procurement and installation of "Proton Exchange Membrane (PEM) Fuel Cell Test Station with Necessary Accessories"	1 Unit

2. Specifications and allied Technical Details

As per the specification mentioned in Annexure II

3. Format of Quotation (tick appropriate box)

It is a **two-part** bid with separate techno-commercial and price bids.

4. The bid should be submitted through <https://eprocure.gov.in/eprocure/app>

5. Quotations should be valid for a period of **90 days** from the date of opening of techno-commercial bid.

6. Some important dates:

i.	Pre-bid Conference	Date: NA	Time: NA
ii.	Last date for submission of Bid:	Date: 10/03/2021	Time: 03:00 PM
iii.	Date of opening of Techno-commercial Bid:	Date: 12/03/2021	Time: 03:00 PM

7. **Warranty:** One year standard warranty.

8. **GST:** GST should be charge according to applicable rates.

9. **Tender Cost:** Tender cost (Non- refundable) in the shape of Demand Draft for **INR. 500/- (Rupees Five Hundred Only)** in favor of "Director, NIT Rourkela" Payable at Rourkela from any Scheduled Commercial Bank except Co-operative and Gramin bank. Tender Cost should reach physically through speed post/ register post/courier containing in an envelope & superscripted with subject, tender reference number addressing to **Registrar, NIT Rourkela- 769008, Odisha; on or before 12/03/2021 at 03:00 PM**, failing which the will be summarily rejected.

10. **Bid Security:** It is mandatory to submit the "**Bid Security declaration**" form as mentioned in **Annexure I**, failing which the bid will be summarily rejected.

11. **Performance Security: 3 % of the contract value** should be deposited to the Institute within 15 days from the date of issue of Purchase Order, in shape of Demand Draft (DD)/Bank Guarantee in favor of "Director, NIT Rourkela and payable at Rourkela" from any Scheduled Commercial Bank except Co-operative and Gramin bank. And Performance security should remain valid for a period of 60 days beyond the date of completion of all contractual obligations of the suppliers including warranty obligation.

12. Please go through the enclosed "bid document" carefully for other bidding instructions.

13. Please send your quotations through: <https://eprocure.gov.in/eprocure/app>

14. Technical Bid Evaluation Criteria:

- (i) If the supplier is Original Equipment Manufacturer (OEM) should have own service center in India. The bidders must enclose details of their infrastructure with reference to locations and technical manpower, availability of inventory spares etc. A valid GST registration certificate of OEM should be submitted along with bid.
- (ii) Scanned copies of the technical brochure of the above equipment and accessories (**AnnexureII**) given in the quotation must be included in the technical bid.
- (iii) Design and schematic diagram of the equipment should be provided for better understanding.
- (iv) Web references must be provided along with the technical bid.
- (v) Point wise technical compliance along with any deviation of the mentioned specifications (**Annexure-II**) must be indicated along with technical documents.
- (vi) Make and model no. should be mentioned in the technical bid.
- (vii) Copies of five purchase orders in the last five years for the supply of the same/equipment similar must be attached.

Financial Bid Evaluation Criteria:

Final Price comparison for the award of contract to decide lowest price (L1) will be made based on the prices quoted for item no. 1.01 in BOQ.

- 15.** For technical details, you may contact

<p>Dr. S. Murugan, Professor Department of Mechanical Engineering, National Institute of Technology, Rourkela – 769 008 Phone: +91-9437140949, +91-661-2462525/ E-mail: murugans@nitrkl.ac.in, muruganresearch@yahoo.com</p>

NB: Please furnish your Dealership Certificate (must) and Proprietary Nature Certificate (If applicable)



NATIONAL INSTITUTE OF TECHNOLOGY ROURKELA – 769 008, ODISHA

BID DOCUMENT

1. Instructions to the bidders

- 1.1 Bids are invited on behalf of the Director, National Institute of Technology (NIT), Rourkela – 769 008, Odisha, from the intending bidders for supply of the goods/stores/ equipment for the Institute as detailed in the enquiry letter.
- 1.2 The bidders should quote their offer/rates in **BOQ** in clear terms without ambiguity.
- 1.3 In case of any discrepancy between the rates in figures and that in words, the rate in words will be accepted as correct.
- 1.4 The last date for receipt of the bid is marked in the enquiry.
- 1.5 The Bid should be uploaded in <https://eprocure.gov.in/eprocure/app> Please follow the guidelines of the site.
- 1.6 If a prospective bidder requires any clarification in regard to the bidding documents, he may make a request the concerned officer or faculty member at least 15 days before the deadline for receipt of bids.
- 1.7 Bids received after the deadline of receipt indicated in para 1.4 above, shall not be taken in to consideration.
- 1.8 Each bidder shall submit only one bid. A bidder, who submits more than one bid, shall be disqualified and considered non-responsive.
- 1.9 (In respect of high value plant, machinery etc. of a complex and technical nature). The bids may be submitted in two parts, viz., technical bid and financial bid.
- 1.10 The bidder has to sign in full at all pages of the scanned part of the bidding document. No over-writing in those pages is acceptable.
- 1.11 If any bidder does not fulfil technical specification, his/her eligibility will be cancelled even if his/her price got L1 status.
- 1.12 Bidders registered with any of the following agencies/ bodies as per Public procurement policy for Micro & Small Enterprises (MSE) order 2012 are exempted categories from payment of EMD & Tender Cost provided that the registration Certificate issued by any one of these below mentioned agencies must be valid as on close date of tender. Micro small or medium enterprises who have applied for registration or renewal of registration with any of these agencies/bodies but have not obtained the valid Certificate as on close date of tender are not eligible for exemption.
 - i) Khadi and Village Industries Commission (KVIC)
 - ii) National Small Industries Corporation (NSIC)
 - iii) Any other body specified by Ministry of MSME/GOI

2. Conditions of the bid

- 2.1 The rates quoted should preferably be net, inclusive of all taxes and duties, packing, forwarding, freight, Insurance and all other incidental charges. In case these charges are quoted extra in addition to the quoted rates, the amount thereof or Ad Valorem rate must be specified. Packing, forwarding, freight etc., when quotes separately are reimbursable at actuals. If external agencies are employed, their receipts must be enclosed with the invoice.

- 2.2 Duties and Taxes are to be quoted separately. Ad Valorem rates thereof should be clearly indicated with reference to the relevant Acts and Rules.

It may be noted that the Institute is availing custom duty exemption in terms of Notification No. 51/96 – Customs dt. 23.07.1996, Notification No. - 47/2017- Integrated Tax (Rate) dt. 14.11.2017 and Notification No- 45/2017 – Integrated tax (Rate) dt. 14/11/2017 & Notification No. - 45/2017- Central tax (Rate) dt. 14.11.2017, Notification No. - 45/2017- Union Territory Tax (Rate) dt. 14/11/2017 [Vide DSIR, Ministry of Science and Technology, Government of India, Registration No.: TU/V/RG- CDE (227)/2016, dated: 13.11.2018].

- 2.3 The goods are required to be delivered at the indenting Department of NIT, Rourkela, and must be reached within **90 days** from the date of placement of the supply of order under the risk and arrangement of the bidder and offers with delivery beyond the above period shall be treated as unresponsive. In case the delivery time is higher, the same must be mentioned clearly in the quotation.
- 2.4 The bid should remain valid for a period of **90 days** from the date of opening of techno-commercial bid. In case your offer has a different validity period that should be clearly mentioned in the quotation.
- 2.5 Conditional discount, if any, offered by the bidder shall not be considered at the time of evaluation.
- 2.6 The goods offered should strictly conform to the specification and technical details mentioned in **Annexure-II**.
- 2.7 The Institute may like to conduct pre-dispatch inspection of goods, where applicable.
- 2.8 Period of guarantee/warranty, where applicable, should be specified in the bid.
- 2.9 If the successful bidder, on receipt of the supply order, fails to execute the order within the stipulated period, in full or part, it will be open to the Director, NIT Rourkela to recover liquidated damage from the firm at the rate of 1 percent of the value of undelivered goods per month or part thereof, subject to a maximum of 5 percent of the value of undelivered goods. Alternatively, it will also be opened to the Director, to arrange procurement of the required goods from any other source at the risk and expenses of the bidder.
- 2.10 The successful bidder may be required to execute a contract, where applicable.
- 2.11 The bidder has to furnish up to date Income Tax Clearance Certificate along with the bid.
- 2.12 Purchase order / Work order shall be placed on the bidding firm(s). In case of deviation to this, if any, the bidding firm should produce any such sufficient documents/credentials i.e, Agreements, MOUs, Arrangements etc. with the third party/ OEM to satisfy the buyer. A consent letter from the third party/ OEM to that effect must be enclosed along with the bidding documents.
- 2.13 Payment (100 percent) will be made by Account Payee Cheque/Bank Draft, within 30 days from the date of receipt of the goods in good condition or receipt of the bill, commissioning of the equipment, where applicable, whichever is later/latest.
- 2.14 In case of Advance payment, the payment will be made on either in Foreign Demand Draft or Wire Transfer only. The proforma invoice copy need to be sent for advance payment.
- 2.15 State Bank of India is the sole Banking partner for NIT Rourkela for operation of LC (Letter of Credit).
- 2.16 In the event of any dispute arising out of the bid or from the resultant contract, the decision of the Director, NIT, Rourkela shall be final.
- 2.17 The bid document/resultant contract will be interpreted under Indian Laws.

BID SECURITY DECLARATION

Tender Ref. No.: _____ Dated: _____

Tender ID: _____

To

**The Registrar,
National Institute of Technology, Rourkela
Sundargarh, Odisha-769008**

The undersigned, declare that I/We understand that, according to your conditions, bids must be supported by a Bid Securing Declaration. I/We accept that I/We may be disqualified/ suspended from bidding for any tender /contract in your Institute (NIT Rourkela) for a period of Five Years from the date of notification of present tender, if I am /We are in a breach of any obligation under the bid conditions as under, if I/We

- a) Withdraw/modify/amend, impair or derogate the tender/bids, during the period of bid validity specified in the form of Bid; or
- b) having been notified of the acceptance of our Bid by the purchaser during the period of bid validity
 - (i) fail or refuse to execute the contract, if required, or
 - (ii) fail or refuse to furnish the Performance Security, in accordance with the Instructions to Bidders.

I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the validity of my/our Bid.

Signed: (insert signature of person whose name and capacity are shown) in the capacity of (insert legal capacity of person signing the Bid Securing Declaration)

Name: (insert complete name of person signing the Bid Securing Declaration) Duly authorized to sign the bid for and on behalf of (insert complete name of Bidder)

Dated on _____ day of _____ (insert date of signing) Corporate Seal (where appropriate)

(Note: In case of a Joint Venture, the Bid Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid)

DETAILED TECHNICAL SPECIFICATIONS

Procurement and Installation of Proton Exchange Membrane Fuel Cell Test Station with Necessary Accessories

S.No	Description of Goods/Service	Quantity
1.	<p>Specifications;</p> <p><u>Fuel cell:</u> Max. load current : 0-250 A Power range : 600W-1200 W Maximum load current should be able to draw at near zero cell voltage</p> <p>Gas Supply Specification: Mass flow H₂ - anode: 0 –15 SLPM Mass flow O₂ - cathode: 0 – 50 SLPM</p> <p><u>Pressure Control and Measurement:</u></p> <p>Backpressure gas controller - anode and cathode: YES Cell inlet pressure sensor range - anode and cathode: YES Gas inlets pressure sensors: YES</p> <p><u>Humidification:</u> Humidifier - micro bubbler : YES Dew Point : Upto 90 °C Gas temperature : 100°C Current range : 0 - 20 A Voltage range : 0 - 20 V Usable maximum power : 1.0 kW</p> <p><u>FC Stack Connectivity:</u></p> <p>It should comprise Thermally isolated inlet hoses, Internal tubing heaters, Thermocouples, Cell heater: Integrated PID control and Cell voltage monitoring.</p> <p><u>The test station must provide the following:</u></p> <p>Security shut down with hydrogen purging, Emergency manual shut down switch (E-Stop), Remote emergency shut down (HW interlock), and Closed exhaust system with water separator.</p> <p><u>Software:</u></p> <p>Desktop master PC: OS Windows 10, Software with graphic interface and Data Acquisition</p>	01

Installation and Training: A 2-day installation post-training should be provided by the bidder.

Other Requirements	
Demonstration of instrument performance.	The supplier should demonstrate the working of the equipment by detecting some compounds of interest at the time of installation of the equipment. The acceptance would be subject to meeting the required criterion.
Manuals	1 set of detailed operation, servicing and Programming manual should be provided in both soft form as well as Hard copy. Language should be English only.
Installation	Enclose pre-installation guide for the details on electrical power, space and other for all components and essential accessories. The satisfactory installation has to be ensured to the full specifications of the machine with all accessories at NIT Rourkela campus. Any additional equipment/accessory for the installation of the system should be quoted invariably. NIT Rourkela will provide only space and electrical connection along with necessary solvents for running the equipment. The manufacturer has to stand guarantee for the relocation of the system from the present campus of NIT Rourkela to any other place if any in future.
Training	Supplier should provide a comprehensive and free training to NIT Rourkela faculty, staff and students for at least 3 working days on operation and preventive maintenance.
Warranty	01 Year Standard Warranty (Front line service to be done at customer place & if any cards/modules are to be replaced can be taken to service center & back to bench service charges to be borne by Bidder). The Original End Manufacturer (OEM) should have Calibration and other maintenance support facility located in India.

Other Qualification Criteria:

1. Complete technical specification of the instrument and its necessary parts and accessory items required for running the instrument
2. Scanned copy of the technical brochure and website reference of the same must be included in the bid.
3. There must be a local maintenance center with the availability of the spares in India. The registered address of the local maintenance center should be provided.
4. A declaration from the Principal stating that the spares will be made available for the equipment for at least 5 years from the date of installation.
5. The average turnover of the bidder in the last 3 Financial Years should be at least Rs. 2.0 crores. Relevant documents to be provided.
6. The bidder should have proven track record in Govt. Sector at least for 7 years. POs in favor of the bidder to be provided as proof.
7. A duly signed detailed User List (at least 5) with the concerned person's valid contact details, in India where the instruments are still in the operational condition must be provided for each of the instrument.
8. Copies of at least 5 POs/installation certificates of similar or higher specifications than the quoted instrument from Govt. organizations/ labs/ institutes should be provided. The POs/installation certificate should not be older than 5 years.
9. A copy of the Authorization Certificate issued by the Principal in favour of the Indian agent along with a certified copy of the Agency Agreement between the foreign Principal and Indian agent. Both these certificates must be up-to-date.
10. In case of imported items, a letter in the official letterhead of the principal declaring the Indian agent as their authorized agency to bid. The letter must contain the official tender enquiry number as depicted in the e-portal, must be included with the technical bid. (This must not be clubbed with Authorization Certificate)
11. A duly signed separate compliance sheet of the specification (at every point) mentioned in the technical part along with the deviation (if any). This compliance sheet will not be considered as the technical specification of the instrument.
12. Profit and loss statements and balance sheets of the financial year 2018-2019 (as on year ended, i.e., 31.03.2020) must be provided along with the technical bid.
13. Income tax return (ITR) of the assessment year 2018-2019 must be provided along with the technical bid.
14. Dealership Certificate and Proprietary Nature Certificate (If applicable) must be provided along with the technical bid.
15. Price should include installation.