



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

Advertised Tender Enquiry

Department: Food Process Engineering

Tender Notice No: NITR/PW/FP/2020/216

Date: 22/12/2020

IMPORTANT DATES

To

Bidding through
e-Procurement module of
CPP Portal

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

Event	Date	Time
Pre-bid meeting (Online)	30/12/2020	11:00 AM
Last date of submission of bid	12/01/2021	11:00 AM
Date of opening of techno-commercial bid	13/01/2021	11:00 AM

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 clarification:

Yours sincerely,

Attention:
Dr. Mohd Khalid Gul (Assistant Professor)
Department of Food Process Engineering,
National Institute of Technology,
Rourkela – 769 008
Phone: 7006397480/2904
E-mail: gulmk@nitrkl.ac.in

Dr. Mohd Khalid Gul
(Assistant Professor)
Food Process Engineering
NIT Rourkela

Encl:

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

1. Schedule of requirements

SL.NO	Description of Goods/Service	Quantity
1.	HPLC (High Performance Liquid Chromatography) equipment with all accessories	One

2. Specifications and allied Technical Details: As per the specification attached in the **Annexure-II**

3. Format of Quotation:

It is a two-part 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 (Online)	Date:	30/12/2020	11:00 AM
ii.	Last date for submission of bid	Date:	12/01/2021	11:00 AM
iii.	Date of opening of techno- commercial bid	Date:	13/01/2021	11:00 AM

7. The Pre-bid Conference will be held through online mode via Google meet (<https://meet.google.com/fuh-bdfw-sai>) in the "**Dept. of Food Process Engineering, NIT Rourkela- 769008**" as per the schedule date & time given above for clarifying issues and clearing doubts, if any, about the specification & other allied technical details. The prospective bidders may attend the pre-bid conference through online mode via Google meet using the given link (<https://meet.google.com/fuh-bdfw-sai>) on scheduled date, time as mentioned above.

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

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

10. **Tender Fee:** 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 13/01/2021 at 11:00 AM**

11. **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.

12. **Performance Security: 3% of Contract Value** should be deposited to the Institute within 15 days 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 Cooperative 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

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

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

15. Technical Bid Evaluation Criteria:

- I. At least 10 Purchase Orders from IIT/ NIT/IISER/reputed Indian institute/Govt. R&D organizations of the same Quoted Model must be provided where the above equipment with accessories (**Annexure-II**) have been supplied in last five years. Scan copies of the minimum Ten purchase orders of the above equipment and accessories (**Annexure-II**) must be enclosed along with the technical bid.
- II. The 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.
- III. Scanned copies of the technical brochure of the above equipment and accessories (**Annexure-II**) given in the quotation must be included in the technical bid.
- 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.

Financial Bid Evaluation Criteria:

1. 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.

16. For technical details, you may contact

Dr. Mohd Khalid Gul (Assistant Professor)
Department of Food Process Engineering,
National Institute of Technology, Rourkela – 769 008
Phone: 7006397480/2904
E-mail: gulmk@nitrkl.ac.in

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– 769008, 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 tender document.
- 1.5** The bids 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, s/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., techno-commercial 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 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 packing, forwarding, freight, Insurance and all other incidental charges including taxes. 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. 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 as mentioned in schedule of requirements in the tender documents.

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 GST and 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** State Bank of India is the sole Banking partner for NIT Rourkela for operation of LC (Letter of Credit).
- 2.15** In the event of any dispute arising out of the bid or from the resultant contract, the decision of the Director, NIT, and Rourkela shall be final.
- 2.16** 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 SPECIFICATION

Specifications for HPLC (High Performance Liquid Chromatography) equipment with Accessories:

Sealed tender bids are invited from reputed/authorized vendors/companies for Software Defined Radio Module with following tender specifications.

SPECIFICATION FOR HPLC SYSTEM WITH PHOTO DIODE ARRAY, FLUORESCENCE & REFRACTIVE INDEX DETECTOR

ALL SHOULD BE FULLY SOFTWARE CONTROLLED

1. HPLC Pump (or delivery system) - 2 NO.'s

- 2 Nos. of integrated HPLC pumps with dual reciprocating pistons and non-circular gear driven, free standing pump should be provided to work in Isocratic, Binary Gradient and semi preparative mode.
- Programmable flow range/rate: 0.000 to 10.000 ml/min per pump with 0.01 ml/min increment or better.
- The system delay volume should be lesser than 200 µl for high sensitivity. It must be mentioned in the data sheet provided by the vendor.
- The system should be capable of delivering precise volumes of mobile phase with minimum 45 step/µl or better.
- Flow Precision: 0.1% RSD or better.
- Maximum Pressure: 6000 psi throughout entire Flow rate.
- Flow accuracy: + 1% or better
- The system should be capable to withstand the retention time variations of less than 0.1% for highly reproducible peak performance.
- Should have the capability to operate in at least 10 or more various gradient curve mode including Linear, Step, concave, convex. Exponential etc.

2. Manual injector

- The manual injector should be fully integrated with the pump. No separate free-standing panel should be there for the injection. A sketch / drawing should also need to be provided along with the technical details which must show the same.
- Should come with 5, 20, 50 and 200µl sample loops along with 25µl syringe.
- Should have the construction for sample load without interruption of flow.
- Death volume-free syringe guidance must be present along with Built-in injector signal.

3. Photo Diode Array Detector

- Wavelength range: 190-800 nm or higher.
- Wavelength repeatability: ± 0.1 nm or better.
- Wavelength Accuracy: ± 1 nm or better.
- Optical resolution: 1.2 nm or better.
- Date Acquisition: Up to 80 Hz or higher.
- Light Source: Should be a Single Deuterium lamp covering entire range; Lamp should be of 2000 hrs warranty without drop in the energy level with appropriate backup from software and hardware. It should be associated with Lamp optimization software to ensure consistent high sensitivity applications & reproducibility.
- Flow cell Design: Should be a Taper / Tapered Slit in the flow cell to avoid total internal reflection with a Cell Volume lesser than 8.5ul.
- Spectral Resolution/Optical Band pass: 1.2nm per photodiode with a total of 512 photodiodes, digital and optical.
- Digital Resolution: 1.2nm or better.
- Sensitivity Setting Range: 0.0001 – 2.0000 AUFS or better.

4. Fluorescence Detector

- Wavelength Range: 200 to 890 nm
- Emission Wavelength Range: 210 to 900 nm
- Bandwidth: 20 nm
- Wavelength Accuracy: ± 3 nm
- Wavelength Repeatability: ± 0.25 nm
- Sensitivity: S/N, Raman peak of Water ≥ 1000
- Measurement Range: 0.001 to 100,000.000 emission units.
- Data Channels: Up to Four 2D channels or One 3D channels.
- Sampling Rate: Upto 20 points / s.
- Light Source: Xenon Lamp, should have 2000 hrs warranty.
- Flow cell design: Axially Illuminated.
- Flow Cell Volume: 13 μ l
- Flow Cell must be added for doing Mycotoxins/Aflatoxins along with Methods to perform.

5. Refractive Index Detector:

- RI Units: 1.00 to 1.75 with measuring range of 5×10^{-4} to 7.0×10^{-9} RIU.
- Flow cell should be temperature controlled with heat exchangers to have minimum noise of 1.5×10^{-9} RIU with 2s time constant.
- Cell should have minimum volume of 10 microliter or less to be compatible with flow rates up to 10ml/min.
- Flow Cell: Fused Quartz with Flow cell volume: 10 μ l.
- Light source: LED having lifetime warranty.

6. Column Oven

- Should have provision for housing at least three or more columns
- Temperature setting range: Ambient to 150 °C or better.
- Operating temperature: Ambient to 150 °C or better.
- Peltier heating facility should be available for maximum temperature accuracy and quick heating.

7. Original Manufacturer Chromatography Software

- Chromatography software with integrated Oracle & secured database must be present.
- Oracle database must be present for easy tracking and trending: *Instrument Method, Processing Method, Report Method, etc.
- The software must come with System Suitability facility for Method validation, System performance, Reproducibility, Tracking and plotting trends & Processing and reporting.
- The Software also must come with 2 numbers of Base Licenses & 5 numbers of named user's licenses for the creation of separate user names & passwords. The software must control 2 numbers of HPLC systems simultaneously without any further upgradation in future.
- Custom field / Custom calculations must be present.
- Pre-made templates, customizable data reports, online help and answer Wizards must be included to help maximize your lab's productivity.
- Each injection is time and date stamped for easy archiving, retrieval of data with Drag and Drop, look and feel of Windows.
- Report publisher facility for customized reports along with Custom reporting with view filters for easy retrieval.
- Software should offer multiple levels of password, security to ensure the integrity of all your raw data and results.
- The Software must be associated with Audit Trail.
- The Software must have the capability to operate in at least 10 or more various gradient curve mode including Linear, Step, concave, convex. Exponential etc.
- Security of data, custom reporting with view filters for easy retrieval must be present.

8. Columns & Accessories: (Applications: Mycotoxins, Aflatoxins, Bleaching agents, Vitamins, Sugar, Antioxidants, Peptides, Phenolics etc.)

- An end-capped C18 HPLC Column for retaining both Polar & Non-Polar Compounds in a reverse Phase environment with dimension 4.6 mm X 250 mm, 5 um - 1 No. (Details must be submitted)
- An end-capped C18 HPLC Column (for Non-Polar Compounds) which can work in extreme pH (1-12) & other operating condition with dimension 4.6 mm X 250 mm, 5 um - 1 No. (Details must be submitted).
- Sugar - Pak column of 6.5 mm X 300 mm for the analysis of Arabinose, Fructose, Galactose, Glucose, Glucose-6-phosphate, Maltose, Mannitol, Raffinose & Stachyose. Detailed Retention times of each compound should also be mentioned in the technical details: 1 No.
- Sample Filtration / Preparation cartridges required for the above-mentioned applications must be supplied along with the instrument & categorically must be mentioned along with available methods.
- Branded Desktop Computer with minimum 16 GB RAM, Original Windows 10, 64 BIT, 500 GB Hard-disk must be supplied.
- UPS 2KVA with 30 mins backup must be supplied.

9. Instrument & Software Qualification Service & Certification & Validation: The instrument must be Qualified along with the Software. Necessary reagents along with Documents must be provided for valid Instrument Qualification, Operational & Performance Qualification of the instrument along with Specification check during the installation. The vendors must quote the Qualification kits with defined list of items along with valid Cat. No./Cas No/Product ID etc.

10. Warranty: 12 months comprehensive on the entire instrument.

11. The Quoted model must have a reference / PO Copies of at least 10 numbers in the eastern India, the detailed list must be submitted along with PO copies / Official Users Certificate.

12. Detailed hardware & application training must be provided by the vendor.

13. The pre-installation guide for the details on electrical power, space and other for all components and essential accessories must be submitted along with the Bid.

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	The satisfactory installation 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.
Training	Supplier should provide a comprehensive and free training to NIT Rourkela engineers for at least 3 working days on operation and preventive maintenance of the SDR modules.
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.

Guarantee / Warranty and after sales technical support

The tender must be quoted with one year on-site comprehensive Warranty/Guarantee commencing from the date of complete and satisfactory installation of the equipment against the defect of any manufacturing, workmanship and poor quality of the components. The bidder also must agree and issue a certificate stating that technical query will be responded within 7 working days and the support will be provided within 21 working days from the date of reporting of the technical failure for down time free operation of the instrument.

Operation and service manual in English (electronic and hard copy) should be provided with all the equipment and components.

In the technical details, specify clearly about the kind of service/maintenance required for the system. Also mention that whether the service has to be carried out by a company engineer or it can be carried by trained service personnel within India.

The complete training of all measurement options should be free for NIT Rourkela user staff/students' members, onsite.

Enclose pre-installation guide for the details on electrical power, space and other for all components and essential accessories.

A list of institutes (with details) in India where the similar equipment (with all options in this tender) has been sold or is under operation should be provided. Prospective vendor should clearly mention the type of measurement options (along with the main system) supplied to these institutes.

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.