



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

**Advertised Tender Enquiry**

**Department: Food Process Engineering**

**Tender Notice No: NITR/PW/FP/2020/213**

**Date: 21/12/2020**

**IMPORTANT DATES**

**To**

Bidding through  
e-procurement module of  
CPP Portal

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

<b>Event</b>	<b>Date</b>	<b>Time</b>
Pre-bid meeting	<b>NA</b>	<b>NA</b>
Last date of submission of bid	<b>11/01/2021</b>	<b>03:00 PM</b>
Date of opening of techno-commercial bid	<b>12/01/2021</b>	<b>03:00 PM</b>

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: 0661-246-2904/7006397480**  
**E-mail: [gulmk@nitrkl.ac.in](mailto: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.	Gas Chromatograph with all accessories	One

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

3. Format of Quotation (tick appropriate box)

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	Date:	<b>NA</b>	<b>NA</b>
ii.	Last date for submission of bid	Date:	<b>11/01/2021</b>	<b>03:00 PM</b>
iii.	Date of opening of techno- commercial bid	Date:	<b>12/01/2021</b>	<b>03:00 PM</b>

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

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

9. **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 12/01/2021 at 03:00 PM**

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 Contract Value should be deposited to the Institute within 15 days of 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 Schedule 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. 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.

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

<p><b>Dr. Mohd Khalid Gul (Assistant Professor)</b> <b>Department of Food Process Engineering,</b> <b>National Institute of Technology, Rourkela – 769 008</b> <b>Phone: 7006397480/2904</b> <b>E-mail: <a href="mailto:gulmk@nitrkl.ac.in">gulmk@nitrkl.ac.in</a></b></p>
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**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, 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 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 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.
- 2.10 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.

- 2.11 The successful bidder may be required to execute a contract, where applicable.
- 2.12 The bidder has to furnish up to date GST and Income Tax Clearance Certificate along with the bid.
- 2.13 State Bank of India is the sole Banking partner for NIT Rourkela for operation of LC (Letter of Credit).
- 2.14 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.
- 2.15 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 Gas Chromatograph with Accessories:**

Sealed tender bids are invited from reputed/authorized vendors/companies for Gas Chromatograph with following tender specifications.

Description	Qty												
<p><b>Gas Chromatograph, Performance Specifications</b></p> <ul style="list-style-type: none"> <li>• <b>Typical retention time repeatability: &lt;0.0008 min</b></li> <li>• <b>Typical peak area repeatability: &lt;0.5 % RSD Oven Specifications</b></li> <li>• Column oven (H x W x D): 27 x 27 x 17.7 cm; 12.9 L</li> <li>• Operating temperature range: ambient +3°C to 450°C</li> <li>• <b>Cryogenic option minimum temperature: -100°C with liquid nitrogen; -50 with liquid CO2</b></li> <li>• Temperature set point resolution: 0.1°C</li> <li>• <b>Number of ramps/plateaus: 32/33</b></li> <li>• <b>Maximum heating rate: 125°C/min</b></li> <li>• <b>Oven cool-down (22°C ambient): 450°C to 50°C in less than 4 min.</b></li> <li>• <b>Ambient rejection: &lt; 0.01 °C per 1 °C</b></li> </ul>	01												
<p><b>Maximum Heating Rate</b></p> <table border="1" data-bbox="175 814 1414 984"> <thead> <tr> <th>T Range °C</th> <th>Heating Rate °C/min</th> </tr> </thead> <tbody> <tr> <td>50 to 70</td> <td>125</td> </tr> <tr> <td>70 to 115</td> <td>100</td> </tr> <tr> <td>115 to 175</td> <td>80</td> </tr> <tr> <td>175 to 300</td> <td>50</td> </tr> <tr> <td>300 to 450</td> <td>35</td> </tr> </tbody> </table>	T Range °C	Heating Rate °C/min	50 to 70	125	70 to 115	100	115 to 175	80	175 to 300	50	300 to 450	35	
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50 to 70	125												
70 to 115	100												
115 to 175	80												
175 to 300	50												
300 to 450	35												
<p><b>IEC (Integrated Electronic Control) Gas Specification</b></p> <ul style="list-style-type: none"> <li>• <b>Up to 18 channels of integrated electronic gas control</b></li> <li>• Pressure set points minimum increments: 0.01 kPa-0.001 psi in all ranges</li> <li>• <b>Carrier Gas Control Common to all Injectors</b></li> <li>• <b>Split ratio: Up to 12500:1</b></li> <li>• Pressure range: 0–1000 kPa (0–145 psi)</li> <li>• Modes: Constant and programmed pressures and flows with gas saver and septum purge</li> <li>• <b>Total flow setting:</b></li> <li>• Control of split flow in 1 mL/min from 0 to 1250 mL/min</li> <li>• Purge flow from 0 to 50 mL/min</li> <li>• <b>Optional Instant Connect Auxiliary Gas Module</b></li> <li>• Maximum number installed: 2</li> <li>• Allows for the control of three additional gas channels</li> <li>• <b>Optional Instant Connect Auxiliary Temperature Module</b></li> <li>• Controls up to 2 additional temperature zones (e.g. cryo options or heated)</li> </ul>													
<p><b>Detectors available:</b> Flame Ionization Detector, Thermal Conductivity Detector, Electron Capture Detector, Nitrogen Phosphorus Detector, Flame Photometric Detector.</p> <ul style="list-style-type: none"> <li>• Available as Instant Connect, user-exchangeable modules</li> <li>• Maximum number installed: 3 including a mass spectrometers on the same oven, or 5 plus an MS when using the TRACE 1300 Auxiliary Oven</li> <li>• Fast data acquisition rate: up to 300Hz for FID, TCD, ECD, NPD and FPD</li> </ul>													
<p><b>General Specifications</b></p> <ul style="list-style-type: none"> <li>• <b>Heated zones:</b> Up to 7 with 1300 GC, or up to 9 with the TRACE 1300 Auxiliary Oven</li> <li>• <b>Time events: 63 user-selectable events. Support up to 8 valves or 16 with the TRACE 1300 Auxiliary Oven.</b></li> <li>• <b>Operating altitude: Up to 3500 m above sea level</b></li> <li>• GC Connectivity: One Ethernet LAN connection with fixed and dynamic DHCP assignment for PC based applications; Two RS-232-C ports for auto-sampler control; Handshaking h/w signal for external devices</li> <li>• Dimensions (H x W x D): 45 x 44 x 67 cm</li> <li>• Weight: 35 kg main unit plus 0.8 kg each Instant Connect injector or detector module</li> </ul>													



<b>Instant Connect Split/Splitless Injector Module</b> Instant Connect-Split/Splitless Injector module, includes: complete injector with integrated electronic gas control (IEC) featuring constant Flow and Pressure modes, programmable Flow and Pressure modes, Leak check and Column Evaluation; Max T = 400°C; split ratio up to 12500:1; Control of split flow in 1mL/min from 0 to 1250mL/min; Purge flow from 0 to 50 ml/min (electronic control); Suitable for all capillary columns (50µm to 530µm id); Large Volume splitless injection up to 50uL using specific liners and pre-column	02
<b>The Instant Connect Flame Ionization Detector (FID) Module</b> Capillary column optimized compatible with 1/8" and 1/16" packed column <ul style="list-style-type: none"> <li>• <b>Flameout detection and automatic re-ignition</b></li> <li>• <b>Minimum Detectable Level (MDL): &lt;1.4 pg C/s</b></li> <li>• Sensitivity: &gt;0.03 Coulombs/gC</li> <li>• Linear dynamic range: &gt;10<sup>7</sup> (+/-10%)</li> <li>• Maximum temperature: 450 °C in steps of 0.1 °C</li> <li>• IEC: <ul style="list-style-type: none"> <li>• Air: 0–500 mL/min in 0.1 steps</li> <li>• H2: 0–100 mL/min in 0.1 steps</li> <li>• Makeup gas (N2 or He) 0–50 mL/min in 0.1 steps</li> </ul> </li> </ul>	01
<b>Instant Connect Electron Capture Detector (ECD) Module</b> Instant Connect-Electron Capture Detector module: high sensitivity and wide dynamic range featuring acquisition rate as high as 300 Hz; MDL: <4.5 fg/s lindane; linear dynamic range = >10 <sup>4</sup> (±10%); integrated electronic gas control (IEC); capillary column optimized; radioactive source: 370 MBq equal to 10mCi, 63Ni; Max T = 400°C; nitrogen or 95%argon/5% methane as make-up gas.	01
<b>Start-up Kit/Installation Kit</b>	1Set
<b>GC Software</b>	01
<b>License Key</b>	01
<b>CALIBRATION Test Mix, FID Detector</b>	01
<b>CALIBRATION Test Mix, ECD Detector</b>	01
<b>TG-5MS GC Column 30M x 0.25MM x 0.25UM</b>	01
<b>TG-OCP I GC Column, 30M x 0.25MM x 0.25UM for Pesticide Analysis</b>	01
<b>TR-Green 11mm Pk 50</b>	01
<b>10uL Syringe 26S Gauge, FN, 57mm Length</b>	01
<b>S/SL LINER SGL TAPER 4X6.3X78.5MM 5PK</b>	01
<b>LINER SEALING RING FOR SSL / 5PK</b>	01
<b>SEPTA BTO 11MM 50/PK</b>	01
<b>COLUMN NUT FOR SSL &amp; SSL BACKFLUSH 5/PK</b>	01
<b>Desktop Computer Configuration:</b> <ul style="list-style-type: none"> <li>• Processor Intel Core i3 7TH Generation Chipset OEM</li> <li>• Memory 8GB DDR3 SDRAM;1TB Hard Disk Drive</li> <li>• Optical Drive DVD Writer</li> <li>• LAN 1 x 10/100/1000</li> <li>• Monitor at least 18.5" wide screen LED TFT</li> <li>• KBD &amp; Mouse</li> <li>• OS Win 10 Professional (License Version) – 64 Bit</li> </ul>	01
<b>Printer 1020 Plus or Equivalent</b>	01
<b>5KVA true online UPS with 30mints backup</b>	01
<b>UHP Grade Hydrogen Filled Gas Cylinder with Double Stage SS Diaphragm Pressure Regulator</b>	01
<b>UHP Grade Nitrogen Filled Gas Cylinder with Double Stage SS Diaphragm Pressure Regulator</b>	01
<b>UHP Grade Zero Air Filled Cylinder with Double Stage SS Diaphragm Pressure Regulator</b>	01

<b>Gas Purification Panel System with Molecular sieve, Moisture &amp; Oxygen traps with necessary tubing's, Nuts &amp; Ferrules for above He, H2, N2 and Zero Gas cylinder</b>	1 Set
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**Other Requirements:**

<b>Demonstration of instrument performance</b>	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.
<b>Manuals</b>	1 set of detailed operation, servicing and other manuals should be provided in both soft form as well as Hard copy. Language should be English only.
<b>Installation</b>	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.
<b>Training</b>	Supplier should provide a comprehensive and free training to NIT Rourkela personnel for at least 3 working days.
<b>Warranty</b>	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.