



**FOUNDATION FOR TECHNOLOGY AND BUSINESS INCUBATION (FTBI)
NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA – 769 008, ODISHA**

Advertised Tender Enquiry

Department: FTBI

Tender notification no: - NITR/PW/FTBI/2019/172

Date: 26/11/2019

To

Important Dates

**Through,
CPP Portal
(E-procurement)**

Event	Date	Time
Pre-bid Conference	NA	NA
Last Date of submission of bid	17/12/2019	11:00 AM
Date of opening of Techno-commercial bid	18/12/2019	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:

ATTENTION:
PIC (FTBI): **Prof. Rajeev Kumar Panda**
FOUNDATION FOR TECHNOLOGY AND
BUSINESS INCUBATION, (TIIR)
NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA – 769 008, ODISHA

Yours sincerely,

Name: Prof. Rajeev Kumar Panda
PIC (FTBI)

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	Fabrication Laboratory Equipment/Machines	1 Set

2. Specifications and allied Technical Details

* Attach Annexure-I

3. Format of Quotation (tick appropriate box)

It is a two part bid with separate technical 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 closing date of the bid.

6. Some important dates:

i)	Pre-bid Conference	Date: NA	Time: NA
ii)	Last date for submission of Bid:	Date: 17/12/2019	Time: 11:00 AM
iii)	Date of opening of Techno-commercial bid:	Date: 18/12/2019	Time: 11:00 AM

7. **Warranty** of minimum one year or six months must be provided.

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

9. **Bid Security and Tender Cost:** Bid Security in shape of Bank Guarantee/DD (Demand Draft) for **INR 90,000/-** (Rupees Ninety thousand Only) and Tender Cost (Non- refundable) in the form of DD 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. And Bank Guarantee/DD for the Bid-Security should remain valid for a period of **45 days** beyond the bid validity period from the date of opening of bids. Bid security of unsuccessful bidders should be return to them at the earliest and latest on or before the **30th days** after the award of the contract. **EMD (Earnest Money deposit)** and **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 18/12/2019 at 11:00 AM**

10. **Performance Security:** (See Item 2.10 of instructions): In shape of Bank Guarantee/DD (Demand Draft) of **Rs.2,25,000**(Rupees Two lakh twenty five thousand only) in favor of **Director, NIT Rourkela** Payable at Rourkela from any Scheduled Commercial Bank except Co-operative and Gramin bank.

11. **Technical Evaluation Criteria:** As per the detailed equipment technical specifications given in Annexure –I. If required, the bidder may be asked to provide clarification regarding the technical aspects.

Other Qualification criteria:

- i. Complete technical specification of the instruments and its necessary parts and accessory items required for running the instrument.
- ii. A complete design along with the clear indication/markings of the specification mentioned in the technical bidding document (wherever possible) of the instrument.
- iii. Make, model and specification of the list of equipment as mentioned in schedule of requirement.
- iv. Scanned copy of the technical brochure and website reference of the same must be included in the bid.
- v. There must be a local maintenance center with the availability of the spares in India.
- vi. A declaration from the Principal stating that the spares will be made available for the equipment for at least 2 years from the date of installation.
- vii. 3 numbers of Scanned copy of PO (not older than 7 years) of similar or higher specification supplied within India (at least ONE from premier Government Institution and R & D Organization).
- viii. A duly signed detailed User List (at least 5) with the concerned person's valid contact details, in India where the instrument is still in the operational condition must be provided.
- ix. 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.(if applicable)
- x. A letter in the official letterhead of the principal declaring the Indian agent as their authorized agency to bid contain the official tender enquiry number as depicted in the CPP portal, must be included with the technical bid. (This must not be clubbed with Authorization Certificate)
- xi. 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.
- xii. Each bidder has to mandatorily quote for all the items as mentioned in BOQ.

12. Financial Bid Evaluation Criteria: The comparison will be made for the award of contract on the overall price basis.

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. For technical details, you may contact

Prof. Rajeev Kumar Panda FOUNDATION FOR TECHNOLOGY AND BUSINESS INCUBATION, (TIIR) National Institute of Technology, Rourkela - 769 008 Phone: 0661 - 2462804 E-mail: rkpanda@nitrkl.ac.in



**FOUNDATION FOR TECHNOLOGY AND BUSINESS INCUBATION (FTBI)
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 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 Each bidder shall submit only one bid. A bidder, who submits more than one bid, shall be disqualified and considered non-responsive.
- 1.8 (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.
- 1.9 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.
- 1.10 Partial submission of bid is not permitted. Bidders should apply for all items.
- 1.11 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 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 **60 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 mentioned in **Annexure-I**.

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 has to furnish "Performance Security" for an amount specified in the enquiry, in the form of Account Payee Demand Draft/or unconditional Bank guarantee en-cashable on demand from the Director, NIT, Rourkela, from a Commercial Bank with validity period of sixty days beyond the date of completion of all contractual obligations of supplier including guarantee/warranty obligations. The Performance Security is to be furnished in favour of the Director, National Institute of Technology, Rourkela, within ten days of intimation, failing which his bid security will be forfeited.

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 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, and after successful installation and demonstration where ever 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 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.
- 2.16 The bid document/resultant contract will be interpreted under Indian Laws.
- 2.17 Partial submission of bid is not permitted. Bidders should apply for all items.

1. DUAL EXTRUDER 3D PRINTER – 1 no.

Description	Specification
Print Technology	HCFF
Maximum printable area	Minimum 400 mm x390 mm x400 mm
Filament diameter	1.75mm
Extruder diameter	0.25,0.4,0.6,0.8mm
Extruder temperature	270C
Number of extruder	Min 2
Model of extruder	Imex Independant Drive
Recommend material	PLA, ABS, PVA, HIPS, PC, ASA
Material support	DILT
Print accuracy	upto150Microns
print speed	Max120mm/s
travel speed	Max150mm/s
Layer precision	Min 35 Microns
Heated bed	Yes
Bed temperature	upto130C
Display	LCD
Connectivity	Wi-Fi, USB, Ethernet
Enclosure type	Powder coated Galvanized steel
Software supported	Should be provided with machine
Total machine weight	Max 75kg
Power supply unit	Internal with feedback stabilization
Run time charge sensing option	Yes
Warranty	Min 1Year
Pause print option	Yes
X y precision	14microns
Secondary extruder	IMEX - Servo controlled independently actuated
System Architecture	Modular
Bed levelling	Automatic, active contact based
Bed Material	Flexible magnetic PEI
Gantry	Core x y
Processor	32bit
HMI	Touch

2. SINGLE EXTRUDER 3D PRINTER – 1 no.

Description	Specification
Print Technology	HCFF
Maximum printable area	Minimum 250mm x250mmx300mm
Filament diameter	1.75mm
Extruder diameter	0.25,0.4,0.6,0.8mm
Extruder temperature	270C
Number of extruder	1
Model of extruder	Imex Independent Drive
Recommend material	PLA, ABS, PVA, HIPS, PC, ASA
Material support	DILT
Print accuracy	150Microns
Maximum print speed	120mm/s
Maximum travel speed	150mm/s
Layer precision	35Microns
Heated bed	Yes
Bed temperature	130C
Lcd support	Yes
Connectivity	Wi-Fi, USB, Ethernet
Enclosure type	Powder coated Galvanized steel
Software supported	Should be provided with machine
Total machine weight	73kg
Power supply unit	Internal with feedback stabilization
Run time charge sensing option	Yes
Warranty	Onsite 1Year
Pause print option	Yes
X y precision	14microns
Secondary extruder	IMEX - Servo controlled independently actuated
System Architecture	Modular
Bedeviling	Automatic, active contact based
Bed Material	Flexible magnetic PEI
Gantry	Core x y
Processor	32bit
HMI	Touch

3. CNC ROUTER – 1 no.

X*Y* Z Working Size		Minimum 1300mm*2500mm*200mm
Idling Speed		≥50000mm/min
Working Speed		≥30000mm/min
Repositioning Accuracy		0.02mm
Spindle Running Speed		0-17500rpm
Machine body and working		T-slot and aluminium table, Steel gantry table
Work holding		By clamps
Transmission system	X	PMI 25 linear square guide rail on X,
	Y	PMI 25 linear square guide rail on Y,
	Z	Ball screw transmission on Z
Spindle	Power	5.5 KW HSD spindle
	Inverter	Delta
	Collet diameter	Ø3.175-Ø12.7mm
Drive system		Stepper motor and lead shine driver
Control System		DSP A11
Working Voltage		AC220V±30V, 50HZ
Command Code		G Code, (*.nc*.mmg, *.u00,etc), *.eng
Working Software		Windows98/XP/7
Compatible Software		Type3/Artcam/UcancamV9/Coreldraw/Autocad

4. CNC Lathe Machine – 1 no.

Power supply	Up to 240V
Drive	600W
Spindle drive X-axis	ball spindle 2.0mm inclination, flank diameter Max 8mm. Step motor :1.8A and 50Ncm. travel distance: Max 70mm
Spindle drive Z-axis	ball spindle 4.0mm inclination, flank diameter Max 12mm. Step motor with 1.8A und 50Ncm travel distance: Max 300mm
spindle revolutions	Minimum 80 - 160 - 330 - 660 - 1,400 - 2,800/min Two-stage with drive belt.
Control	CNC
Software	on CD-ROM, installation under Windows 98, Windows 2000, Windows XP, Windows Vista and Windows 7
Drive connection	RS 232 interface, connecting cables
Sizes	Machine: Max L 910 x W 410 x H 310mm Control unit: Max L 460 x W 275 x H 70mm
Total weight	Machine: Max 48kg / Control unit: Max 4.5kg

5. CNC Milling Machine – 1 no.

Power supply	230V
Drive	BM-400W
Spindle drive X-axis	Recirculating ball spindle with 4.0mm inclination, flank diameter 12mm. Step motor with 2.2A und 1.27Nm dwell moment; travel distance: Max 290mm
Spindle drive Y-axis	Recirculating ball spindle with 4.0mm inclination, flank diameter 12mm. Step motor with 2.2A and 1.27Nm dwell moment; travel distance: Max 100mm
Spindle drive Z-axis	Recirculating ball spindle with 4.0mm inclination, flank diameter 12mm. Step motor with 2.2A and 1.27Nm dwell moment; travel distance: Max 200mm
Spindle revolutions	200 - 4,000rpm.
Control of step motors	CNC control unit
Software	on CD-ROM, installation under Windows 98, Windows 2000, Windows XP, Windows Vista and Windows 7
Drive connection	RS 232 interface connecting cables to PC included in scope of delivery
Sizes	Machine: work table Max 371 x 352mm, table Max 410 x 128mm, total height Max 782mm Control unit: Max L 452 x W 275 x H 65 mm
Total weight	Machine: Max 51kg / Control unit: Max 4.5kg

6. 3D SCANNER – 1 no.

Single Shot Accuracy	Less than 0.1 mm
Scan Volume	Minimum 3 × 3 × 3 cm
Scan Volume	Maximum 70×70×70 cm
Range of Single Capture	Min 200×150 mm
Scan Speed	Greater than 8 s
Point Distance	0.17 mm ~ 0.2 mm
Texture	Yes
File Format	OBJ, STL, ASC, PLY
Camera Resolution	Minimum 1.3 Mega Pixels
Light Source	White Light
Stand-off Distance	290 ~ 480 mm
Computer Requirements (Required)	USB:1 ×USB 2.0 or 3.0; OS: Win7, Win8, Win10 (64 bit); CPU: Dual-core i5 ; RAM: 8G
Computer Requirements (Recommended)	Graphics card: Nvidia series
Weight (unpacked)	Maximum 4.7 kg
Weight (packed)	Maximum 5.1 kg
Dimension	Minimum 565×207×207 mm
Power Supply	40 w
Input Voltage	DC : 12 v, 3.33 A
Calibration Board	Yes
Turntable	Yes
Load Capacity of Turntable	Maximum 5 kg