



NATIONAL INSTITUTE OF TECHNOLOGY ROURKELA – 769 008, ODISHA

ADVERTISED TENDER ENQUIRY

Department: Earth & Atmospheric Sciences

Tender Notice No: NITR/PW-SR/ER/2020/47

Date: 18/03/2020

To

Bidding
through
e-Procurement Portal of
Ministry of HRD, Govt. of India

(e-Wizard)

Important Dates

Event	Date	Time
Pre-bid Conference	NA	NA
Last Date of submission of bid	13/04/2020	03:00 PM
Date of opening of techno-commercial bid	14/04/2020	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. Bhaskar Kundu

Dept. of Earth & Atmospheric Sciences
NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA – 769 008, ODISHA
Phone : (0661) – 246-2936
E-mail: kundub@nitrkl.ac.in

Yours sincerely,

Sd/-

Prof. Bhaskar Kundu
PIC (Structural Geology Lab)

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
01.	Rate State Dependent Friction Experimental Set-up (as per detail Annexure-I)	Annexure-I

2. Specifications and allied Technical Details

As per Annexure – I

3. Format of Quotation

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

4. The bid should be submitted through <https://mhrd.euniwizarde.com/HomePage/ebidSites?siteName=mhrd>

5. Quotations should be valid for a period of **120** days from the closing 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: 13/04/2020 | Time: 03:00 PM |
| iii. | Opening of Techno-commercial bid | Date: 14/04/2020 | Time: 03:00 PM |

7. **Warranty:** Onsite **Warranty** must be clearly mentioned along with the quotation.

8. **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.

9. Other Qualification criteria:

Eligibility of Bidders:

- At least two user names and contacts from NIT/IIT/reputed Indian institute /Govt. R& D organizations as well as Public sector units must be provided where the similar type equipment/accessories (Annexure –I) have been supplied in last three years. Scan copies of the minimum three purchase orders of the above equipment/accessories (Annexure-I) must be enclosed along with the technical bid.
- There must be a local maintenance center within India with availability of the spares.
- Scanned copies of the technical brochure of the above equipment and accessories (Annexure-I) given in the quotation must be included in the technical bid.
- Make and model no. of electrical and mechanical items should be mentioned in the technical bid.
- Bidder who fulfil the requirement as per the Annexure-I shall be eligible to apply. Joint ventures are not accepted.
- The firm should not have been black listed at any time by any Govt. institute or organization. To this effect, an undertaking is to be given in the prescribed format.
- The firm should have an average annual financial turnover of Rs. 30 lacs during the last two years ending 31st March 2019.
- The firm should have at least Rs. 10 lacs purchase order from NIT/IIT/reputed Indian institute /Govt. R& D organizations as well as Public sector units in last two years with month ending December-2019.

- i) Any other points may have deemed fit by the committee at time of technical evaluation of bid documents.
- 10. Financial Bid Evaluation Criteria:** The comparison will be made for the award of contract on the overall price basis.
- 11.** (a) All prices to be quoted on FOR basis (NIT Rourkela) in INR.
(b) GST: GST should be charged at applicable rates against DSIR certificate.
- 12. Bid Security (EMD) and Tender Cost: EMD (Earnest Money Deposit)** need to be submitted through online portal only for **INR 20,000/- (Rupees Twenty Thousand only)** and Tender cost (Non-refundable) through online mode for **INR 1,000/- (Rupees One Thousand only)**. The EMD (Earnest Money Deposit) of unsuccessful bidders should be returned to them at the earliest and latest on or before the 30th days after the award of the contract. EMD shall bear no interest. Any bid without accompanying with EMD & Tender Cost is liable to be treated as non-responsive and rejected.
- 13. Performance Security: INR 60,000/- (Sixty thousand only)** in shape of Bank Guarantee/Demand Draft (DD) in favor of "Director, NIT Rourkela" payable at Rourkela from any Scheduled Commercial Bank except Co-operative and Gramin bank. Performance security should remain valid for a period of 60 days beyond the date of completion of all contractual obligations of the supplier including warranty obligation. Performance Security should be submitted within 15 days from the date of receipt of Order. And EMD (Earnest Money deposit) amount of successful bidder will be returned after the receipt of performance security in case of award of contract to successful bidder.
- 14.** Please send your quotations through e-Procurement Portal of Ministry of HRD Portal <https://mhrd.euniwizarde.com/>
- 15.** For technical details, you may contact

Prof. Bhaskar Kundu
PIC, Structural Geology Lab
Dept. of Earth & Atmospheric Sciences
E-mail: kundub@nitrkl.ac.in
National Institute of Technology, Rourkela – 769 008.



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/ equipments 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 MHRD Portal <https://mhrd.euniwizarde.com/> Please follow the guideline 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 into consideration.
- 1.8 Each bidder shall submit only one bid. A bidder, who submits more than one bid, shall be disqualified and considered nonresponsive.
- 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 are acceptable.
- 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. INSTRUCTIONS FOR ONLINE BID SUBMISSION

The bidders are required to submit soft copies of their bid electronically on the e-Wizard Portal (<https://mhrd.euniwizarde.com>) using valid Digital Signature Certificates. Below mentioned instructions are meant to guide the bidders for registration on the e-Wizard Portal, prepare their bids in accordance with the requirements and submitting their bids online on the e-Wizard Portal. For more information, bidders may visit the e-Wizard Portal <https://mhrd.euniwizarde.com>

2.1 REGISTRATION PROCESS ON ONLINE PORTAL

1. Bidders to enroll on the e-Procurement module of the portal <https://mhrd.euniwizarde.com> by clicking on the link "Bidder Enrollment". Enrolment on the e-wizard Portal.
2. The bidders to choose a unique username and assign a password for their accounts. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the e-Wizard Portal. Bidders to register upon enrolment their valid Digital Signature Certificate (Only Class III Certificates with signing + encryption key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.), with their profile.
3. Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse. Foreign bidders are advised to refer "DSC details for Foreign Bidders" for Digital Signature requirements on the portal.
4. Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / eToken.
5. Bidders must ensure that they have the latest version of Java installed in their local system.
6. The scanned copies of all original documents should be uploaded in pdf format on portal <https://mhrd.euniwizarde.com>
7. After completion of registration payment, you need to send your acknowledgement copy on our help desk mail id ewizardhelpdesk@gmail.com for activation of your account.

2.2 TENDER DOCUMENTS SEARCH

1. Various built in options are available in the e-Wizard Portal to facilitate bidders to search active tenders by several parameters. These parameters include Tender ID, organization, location, date, value, etc.
2. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a tender published on the Online Portal.
3. Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the Online Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
4. The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

2.3 BID PREPARATION

1. Bidder should take into account any corrigendum published on the tender document before submitting their bids.
2. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid.

3. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
4. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / PNG etc. formats. Bid documents may be scanned with 100 dpi with black and white option.

2.4 BID SUBMISSION

1. Bidder to log into the site well in advance for bid submission so that he/she upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
2. The bidder to digitally sign and upload the required bid documents one by one as indicated in the tender document.
3. Bidder to select the payment option as Online" to pay the tender fee/ EMD wherever applicable and enter details of the instrument.
4. A standard BoQ format has been provided with the tender document to be filled by all the bidders. Bidders to note that they should necessarily submit their financial bids in the prescribed format and no other format is acceptable. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BOQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BOQ file, open it and complete the unprotected cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BOQ file is found to be modified by the bidder, the bid will be rejected.
5. The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
6. All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data, which cannot be viewed by unauthorized persons until the time of bid opening.
7. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
8. Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
9. Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet.

2.5 AMENDMENT OF BID DOCUMENT

At any time prior to the deadline for submission of proposals, the institutions reserve the right to add/modify/delete any portion of this document by issuance of a Corrigendum, which would be published on the website and will also be made available to the all the Bidder who have been issued the tender document. The Corrigendum shall be binding on all bidders and will form part of the bid documents.

2.6 ASSISTANCE TO BIDDERS

1. Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
2. e-Procurement support any queries relating to the process of online bid submission or queries relating to e-Wizard Portal in general may be directed to the **24x7 e-Wizard Helpdesk. The contact number for the helpdesk is 011-49606060, 23710092, 23710091, Er Sanjeet Kumar Jha (+91-8882495599), 9355030626. Amit Kumar Jha 9355030627, 9205898226**

Email Support:

For any eProcurement Application Service Requests and Technical issues related to Document Uploads, Tender Publishing, Issue of Corrigendum, Encryption/Decryption Key issues, Bid Evaluation, Bidder Login issues, New Registration issues, Key Uploads, DSC Key installation, Bid Submission, system users may please mail to Sanjeet Kumar Jha ewizardsanjeet.kumar@gmail.com

3. Conditions of the bid

- 3.1 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.
- 3.2 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]

- 3.3 The goods are required to be delivered at the indenting Department of NIT, Rourkela, and must be reached within **30 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.
- 3.4 The bid should remain valid for a period of **120 days** from the date of opening. In case your offer has a different validity period that should be clearly mentioned in the quotation.
- 3.5 Conditional discount, if any, offered by the bidder shall not be considered at the time of evaluation.
- 3.6 The goods offered should strictly conform to the specification and technical details mentioned in Annexure-I.
- 3.7 The Institute may like to conduct pre-dispatch inspection of goods, where applicable.

- 3.8 Period of guarantee/warranty, where applicable, should be specified in the bid.
- 3.9 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.
- 3.10 The successful bidder may be required to execute a contract, where applicable.
- 3.11 The bidder has to furnish up to date Income Tax Clearance Certificate along with the bid.
- 3.12 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.
- 3.13 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.
- 3.14 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.
- 3.15 The bid document/resultant contract will be interpreted under Indian Law.

Annexure-I

Technical description of Rate State Dependent Friction Experimental Set-up.

Sl. no	TYPE / DESCRIPTION	Quantity
1	Mechanical Set Up For Rate State Dependent Friction Experiment	
	a. Linear Slider	
	I. DC Servo Motor: Specification: 1 Horse Power, Voltage 220V, Torque of 2.39Nm that can push load capacity of 100Kg, Rotation speed 3000 to 6000 RMP, Gear box -Capable to rotate at very low velocity of 01micron/sec to 10mm/sec.	1
	II. Ball screw Mechanism: Specification: Linear stage with strong arm that is capable of pushing 100Kg load in horizontal direction, Frequency and amplitude of oscillatory motion of the slider arm could be explored	1
	III. Stabilizer: Specification: 10KVA, for DC Servo Motor.	1
	IV. Table for Drive system (To mount the above given equipment's for experiment)	1
	b. Data Acquisition System with Analysis Software Support	
	I. Data Acquisition System: Specification: PLC of 4 to 10 channels for logging the force sensor load cell data with HMI(human machine interface) for fixing velocity of motor and plotting graph from DAQ, 4 analog inputs, Sampling rate 50 kS/s; 16 or 32 bit resolution, 13 digital I/O lines, one 32-bit counter, USB-2 Lightweight and bus powered for easy portability, Easily connect sensors and signals with screw-terminal connectivity Compatible with ANSI C, C# .NET, VB .NET, LabVIEW, LabWindows™/CVI, and Measurement Studio.	1
	II. Software Support: Specification: Complete turn-key data acquisition software package, Standard edition, User friendly motion controller computer program, Includes recorder: scope, trigger, capabilities, FFT analysis, data storage and export, data analysis and report functions, support for 1 A/D card and 16 A/D channels.	1
	c. Pneumatic Piston Hammer Vibrator & Vibration Frequency Measurement Tool	
	I. Pneumatic Piston Hammer Vibrator to Provide External Vibration: Specification: High impact frequency 60 – 1000 vpm, High power range 1 – 100 N	1
	II. Vibration Measurement Tool Specification: Non-electrical properties testing, Frequency 1~20 KHz	1
	d. Roughness Tester Specification: Least Count 0.001(1 Micron), Measuring Range (0-1000 Microns), Accuracy ± 4 Microns/4% of reading, LED Display	1
	e. Load-Cell (Force Sensor) Specification: S- Type Load-cell, Use for both compressive and tensile load application, with output error less than ± 0.05 , different Weight Capacity from 5 to 100KG)	5
	f. Mechanical Stage for Friction Experiment	
	I. Table for abrasive mounting Base Plate (Capacity to Hold Weight upto 200KG)	1
	II. Angular and vertical mechanical stage: For Glass plate Mounting:	1
	III. Model Dragging Arrangement thru Lead Screw, Lead Nut & Gear as per attached Drawing	1

	IV. Fixture for Gelatine sample	1
	g. High Resolution Imaging Tool with Software Support: For the analysis of movement of gelatine sample over the glass plate surface.	
	I. Imaging Capturing Tool: Specification: Capacity 10 to 25 fps @ 4K UHD 2160p, 20 to 32 megapixels, Excellent light sensitivity, High resolution 1280 x 1024 CMOS sensor, With coordinate sensor	1
	II. Software Support: Specification: High transfer rate of image to computer and instant image analysing computer software interface, with 2 port of Gigabit Ethernet UDP protocol, Image data transfer speeds of up to 10GB per minute, Camera Mounting System, Tripod	1
	h. Visualization and Data Storage Unit and UPS Specification: Processor: core i7 (7 th generation), Hard disc capacity: 1TB HDD, RAM Memory: 8 GB DDR4, Display: 22 inch (HD LED display), Keyboard, Mouse, Preloaded Windows 10 operating system. Universal Power Supply with 30 min Backup from a reputed brand.	1
	i. Sample Preservation Unit (Refrigerator) Specification: at least 180 Litres, Single Door, Inbuilt Stabilizer, Voltage 220-240V	1
	j. Air conditioner (To maintain the room temperature of 15 ^o C that is required for Gelatine Sample to remain solid) Specification: Capacity: 2 TON, Copper coiling. Brand must be specified.	1
2	Sample Preparation Tools and Accessorises	
	a. Gelatine Bulk • Gelatine Powder (1Kg) • Glutaraldehyde (1Kg)	1
	b. Digital Balance Specification: Display Type: 7 Segment LED Display, Display Digit: 6 Digits, Display Size: 0.56, Battery and charger: In Built charger with Rechargeable battery	1
	c. Rotator (For steering process to make hydrogel) Specification: Stable and quite operation, Speed 50 to 2000RMP, Mechanical Timer 0~8hrs, Load Capacity 1 Kg with 300 RMP With variable speed, timer control, continuous operation	1
	d. Accessories: D/E spanner, (Allen key, pliers, adjustable spanner, screw driver set, tester screw driver etc.) with 200mm electronic digital Vernier calliper Biker, Pipet, Cutter, Different grade of Abrasive, Paper / Silicon abrasive paper / Sand paper	1
3	Lab Room Construction & Accessories :	
	a. Lab Room Construction: Specification: Weather Proof Enclosure Material (Electrical Panel): Sheet steel Door: Sheet steel, all-round foamed-in PU seal, Surface finish: Enclosure and door: Dipcoat primed, powder-coated on the outside, textured paint, Mounting plate: Zinc-plated Colour: RAL 7035, Protection category IP to IEC 60 529: IP 66, Protection category NEMA: NEMA 4	1

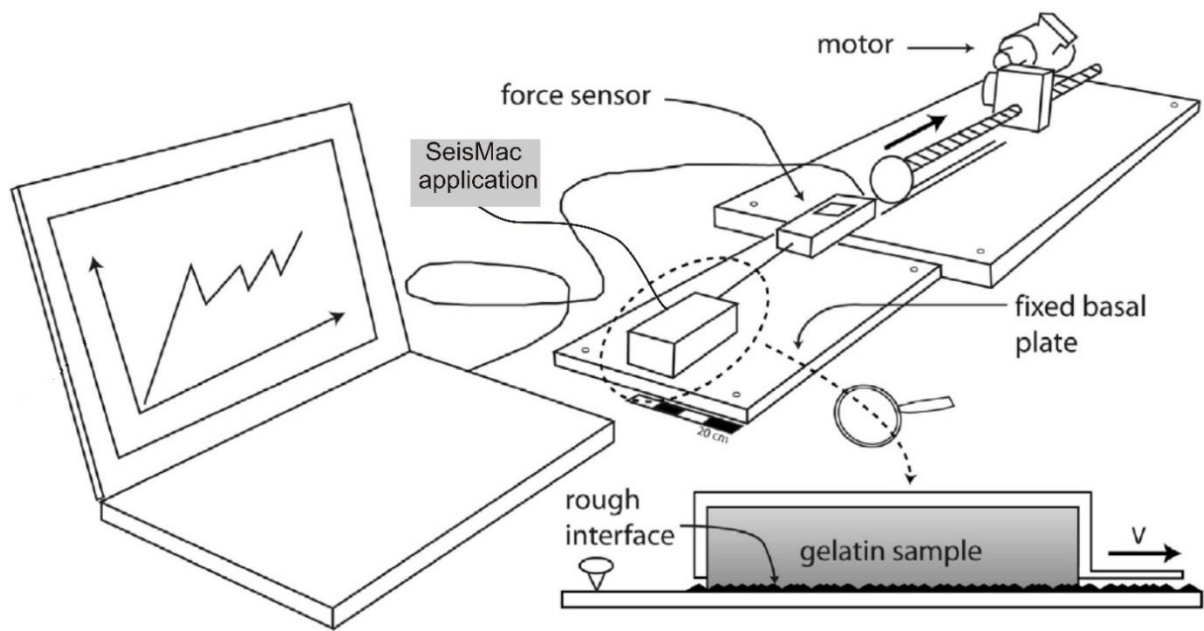


Fig.1. Schematic design of required experimental setup for frictional study.