



राष्ट्रीय प्रौद्योगिकी संस्थान राउरकेला ओडिशा
NATIONAL INSTITUTE OF TECHNOLOGY ROURKELA
ODISHA - 769008

**Supply, Installation, Demonstration and Training of X-ray Photoelectron
Spectrometer (XPS) at NIT Rourkela**

Tender Reference No.: NITR/PW/CRF-PH/2025/356

Date: 08/08/2025

ADVERTISED TENDER ENQUIRY

(E-procurement mode only)

National Institute of Technology Rourkela (NITR) invites online bids from eligible, capable and qualified agency for **Supply, Installation, Demonstration and Training of X-ray Photoelectron Spectrometer (XPS) at NIT Rourkela** through e-procurement module of CPP Portal only. Interested companies may view and download the tender document containing the detailed terms & conditions from the website <http://eprocure.gov.in/eprocure/app>.

CRITICAL DATES FOR TENDER

1.	Title of the Tender	Supply, Installation, Demonstration and Training of X-ray Photoelectron Spectrometer (XPS) at NIT Rourkela
2.	Date of publication of tender	08/08/2025, 14:00 Hrs.
3.	Bid Documents download start date	08/08/2025, 14:00 Hrs.
4.	Pre-bid meeting date and location	NA
5.	Bid Documents download end date	01/09/2025, 10:00 Hrs.
6.	Last date of submission of tender	01/09/2025, 10:00 Hrs.
7.	Technical Bid Opening Date	02/09/2025, 10:00 Hrs.
8.	Financial Bid Opening Date	To be informed to the technically qualified bidders later.
9.	Tender Fee	A non-refundable fee of INR 2,500/- (Rupees Two Thousand Five Hundred only) to be deposited through ONLINE mode only using NET-BANKING / NEFT / RTGS / IMPS or payment online in an acceptable form.
10.	Earnest Money Deposit / Bid Security	A refundable fee of INR 15,00,000/- (Rupees Fifteen Lakh only) to be deposited through ONLINE mode only using NET-BANKING / NEFT / RTGS / IMPS or payment online in an acceptable form.
11.	Delivery Period	8 Months (Includes Installation and Commissioning of Instruments)
12.	Bid Validity	120 days from the date of opening of technical bids.
12.	Location and Site Visit:	CRF, NIT Rourkela
13.	Address for Communication	Prof. Pitamber Mahanandia Department of Physics & Astronomy National Institute of Technology Rourkela – 769 008, Odisha Email: pitam@nitrkl.ac.in Ph. No.: 0661-246-2730 Mobile: +91 6371256542

SECTION – I: INSTRUCTION TO BIDDERS

1. Bid Preparation

- 1.1 Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as a part of the bid. 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 documents that need to be submitted. Any deviations from these may lead to rejection of the bid.
- 1.2 Bidder, in advance, should be prepared with the bid documents to be submitted as indicated in the tender document/schedule and generally, that can be in PDF / XLS / RAR / DWF / JPG formats. Bid documents may be scanned with 100 dpi with a black and white option which helps to reduce the size of the scanned document.
- 1.3 To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates, etc.) has been provided to the bidders. Bidders can use “My Space” or “Other Important Documents” available to them to upload such documents. These documents may be directly submitted from the “My Space” area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for the bid submission process.
- 1.4 Bidder should take into account any corrigendum published on the CPP Portal concerned with this tender document before submitting their bids.
- 1.5 ***NOTE: My documents space is only a repository given to the bidders to ease the uploading process. If a bidder has uploaded his documents in the My Documents space, this does not automatically ensure these Documents are part of the Technical Bid.***

2. Submission of Bid

- 2.1 The tenderer shall submit the tender in two parts in the e-Procurement site (<https://eprocure.gov.in/eprocure/app>) of CPP portal consisting of Part-I (Technical Bid) and Part-II- Financial Bid (i.e. BOQ) each in separate cover.
- 2.2 Bidders should log into the site well in advance of bid submission so that they can 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.
- 2.3 The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 2.4 The bidder has to select the payment option as “Offline” to pay the tender fee / EMD as applicable and enter details of the instrument.
- 2.5 The bidder should prepare the EMD / Tender fee as per the instructions specified in the tender document. The details of the online transaction or any other accepted instrument should tally with the details available in the bank statement and the date entered during bid submission time. Otherwise, the bid shall be technically disqualified.
- 2.6 Bidders are requested to note that they should submit their financial bid in the format provided and no other format is acceptable. 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 the 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 shall be summarily rejected.
- 2.7 The uploaded tender document is readable only after the tender opening by the authorized bid openers.
- 2.8 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 person indicated in the tender.
- 2.9 Any queries relating to the process of online bid submission or queries relating to the CPP Portal, in general, may be directed to the 24x7 CPP Portal helpdesk.

3. Tender Fee and Earnest Money Deposit (EMD)

- 3.1 Tender Fee (non-refundable) of **Rs. 2,500/- (Rupees Two Thousand Five Hundred only)** and EMD / Bid Security (refundable) of **Rs. 15,00,000/- (Rupees Fifteen Lakh only)** to be deposited through **ONLINE** mode only using **NET-BANKING / NEFT / RTGS / IMPS or payment online in an acceptable form.**
- a) The bidders are allowed to submit their bid only after the successful payment of EMD.
 - b) The bidders are required to submit a proof of successful payment details of Tender Fee and EMD along with technical bid i.e. transaction reference no, bank details and UTR no. Any other mode of payment shall not be entertained.
 - c) In online payment of Tender Fee and EMD, if the payment is made by the bidder within the last date and time of bid submission but not received by NIT Rourkela within the last date **as mentioned in e-procurement portal** to any reason(s) whatsoever then the bid will not be accepted. Tender Fee and EMD received after due date and time as specified will be forfeited.
 - d) Bank details for NET-BANKING / NEFT / RTGS / IMPS or payment online in an acceptable form is as follows:

Bank Name: State Bank of India

Branch: NIT Campus, Rourkela, Odisha

Account Name: Security Deposit Account

Account No.: 30046305869

IFSC: SBIN0002109

- 3.2 EMD / Bid Security of the unsuccessful bidder will be returned to them without any interest at the earliest and latest on or before 30 days after the award of the contract to the L1 bidder.
- 3.3 The Part-I offer of those Tenderers, whose EMD and Tender Cost are found in order and submitted as prescribed, will be opened immediately thereafter. Otherwise, the tender will be considered invalid and other parts will not be opened.
- 3.4 Bids received without Earnest Money Deposit and Tender Fee shall stand technically disqualified and thus shall not be considered for evaluation at any stage.
- 3.5 The EMD / Bid Security of the bidder who withdraws its bid in breach of terms and conditions of the contract, withdraws at any stage after the opening of the technical bid or the price bid and who evades or refuses to accept the Award of Contract after being L1 within the period of validity, shall be liable to forfeiture.
- 3.6 The EMD submitted by the successful bidder shall be refunded within thirty days of submission and acceptance of the Performance Security/Performance Bank Guarantee/ Security Deposit in case of award of contract.

4. EMD / Bid Security Exemption

- 4.1 Micro and Small Enterprises (MSEs) as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprises (MSME) for goods produced and services rendered, are exempted from EMD. Accordingly, MSEs shall be required to submit valid Udyam Registration Certificate for availing benefit under MSE Procurement Policy. The benefit as above to MSMEs shall be available only for Goods produced and services rendered by MSMEs. **However, traders are excluded from the purview of MSME Procurement Policy.**
- 4.2 Startup(s) as recognized by Department for Promotion of Industry and Internal Trade (DPIIT), Govt. of India, are exempted from Bid Security. However, they have to enclose valid self-attested registration certificate(s) along with the tender to this effect.
- 4.3 Eligible MSE and startup bidders who seeks exemption from Bid Security as per above clause, if they withdraw or modify their bids during the period of validity, or if they are awarded the contract and they fail to execute the contract, or to submit a performance security before the deadline defined in the request for bids document/contract, they will be suspended for the period of three years or for a period as decided by the competent authority from being eligible to submit bids for

future contracts with the NIT Rourkela. Bidders should submit the duly filled and signed declaration as per the attached format in **Annexure – V**.

- 4.4 Those firms who have applied for renewal of registration with any of the above bodies but have not obtained the valid certificate as of the closing date of the tender are not eligible for exemption.

5. Eligibility Criteria

- 5.1 **Status:** The bidder shall necessarily be a legal entity either in the form of sole proprietorship, partnership, Limited, or Private Limited Company registered under the Companies Act 1956 or subsequent amendments of the act. The bidder in the form of a Joint Venture (JV) / Consortium is not permitted. Copy of Registration No. under the Shop & Commercial Establishment Act may be enclosed. Proof of the status of the bidder shall be submitted. The firm should have registered for a minimum period of 05 years.
- 5.2 **Financial Capacity:** The Bidders should have a minimum average annual turnover of **Rs. 5, 00, 00,000/- (Rupees Five Crore)** in the last three financial years i.e. 2021-22, 2022-23, 2023-2024, Bidders are required to submit documentary evidence like an Audited Balance Sheet, Profit & Loss Statement, and Income Tax Return (ITR) duly certified by a Chartered Accountant.
- 5.3 **Experience:** The bidder/OEM must have successfully commissioned at least **3 numbers of similar /higher capacities in last 5 years** in the premier institutions of India such as IIT's /NIT's/IISER's/IISc/ CFTI's/PSU's/ Government institutions etc. A copy of the Purchase Orders along with satisfactory supply & installation certificate against the respective purchase order should be submitted in support of their experience. NITR may ask for input from user where the quoted instrument has been installed. Supply of only purchase order without any satisfactory supplied & installation report shall not be considered as a valid experience. Bidder must fulfil at least one of the following criteria for the above experience:

The installed reference equipment should be running condition. Proof in this regard with contact details of the user should be provided. All certificates should be attached in the technical bid to evaluate the credibility of the bidder.

- 5.4 Bidder should be an OEM or authorized dealer / distributor of OEM for the tendered items.
- 5.5 Bidders have to submit a Catalogue containing detailed specification of equipment.

6. Documents to be submitted as a part of Technical Bid

- 6.1 Copy of Certificate of Incorporation.
- 6.2 Copy of PAN Card.
- 6.3 Copy of GST registration certificate.
- 6.4 Copy of Labour License, issued by Labour Commissioner, if applicable.
- 6.5 Copy of registration certificate of Employee Provident Fund Organization (EPFO), if applicable
- 6.6 Copy of registration certificate of Employee State Insurance Corporation (ESIC), if applicable
- 6.7 Copy of successful payment of Tender Fee & EMD.
- 6.8 Copy of audited Balance Sheet, Profit & Loss Statement and Income Tax Return (ITR) for the last three financial years ending on 31st march, 202.
- 6.9 Copy of signed agreement / Purchase Order or any other documents which shows the quantity and size of awarded goods for Supply, Installation, Demonstration and Training of X-ray Photoelectron Spectrometer (XPS) along with satisfactory supply & installation certificate against the respective purchase order.
- 6.10 Copy of quoted product brochure.
- 6.11 Duly filled and signed Annexure – III (Tender Acceptance Letter)
- 6.12 Duly filled and signed Annexure – IV (Self Declaration Non-Blacklisting)
- 6.13 Duly filled and signed Annexure – V (Bid Security Declaration for EMD exempted bidder)
- 6.14 Duly filled and signed Annexure – VI (Declaration of local contents)
- 6.15 Duly filled and signed Annexure – VII (Integrity Pact)
- 6.16 **In case of Bidder is an OEM (Original Equipment Manufacturer) or authorized dealer / distributor or OEM:**
- a) GST/Excise documents / Factory license / Pollution Control Board certificate / NSIC Certificate or any other documents clearly indicating that the bidder is a manufacturer of tendered item.
- 6.17 **In case Bidder is authorized dealer / distributor of OEM:**
- a) Bidder shall submit a letter from the OEM authorizing the bidder for participation in tender and execute the order on behalf of the OEM in India.
- b) Guarantee (specific to the tender) shall be provided by the OEM clearly stating that the OEM shall fulfill the contractual obligations for the tendered item.

7. Bid Evaluation Criteria

7.1 Techno-commercial Bid Evaluation

- a. Techno-commercial bids will be opened on the specified date & time by the Tender Evaluation Committee duly constituted by the competent authority of NIT Rourkela. The bids will be evaluated based on the documents submitted by the bidders in the e-Procurement module of CPP Portal and the satisfactory performance report from the previous works. The decision of the committee will be final and binding on all bidders and can't be questioned at any stage of evaluation.
- b. The Institute also reserves the right to seek confirmation/clarification from the issuing agency for the supporting documents submitted by the bidder.
- c. To assist in the examination, evaluation and comparison of the bids, and qualification of bidders, the committee may, at its discretion ask any bidder for a clarification of its bid. The committee's request for clarification and the response shall be in writing through e-procurement mode only. No other mode shall be entertained. Any clarification submitted by a bidder that is not in response to a request shall not be considered.
- d. If any bidder fails to provide the requested clarification/information within the stipulated date and time given by the Institute, the bid shall be technically disqualified.
- e. The request for clarification and the response shall be in writing, without any alterations in the price or substance of the bid submitted.

7.2 Financial Bid Evaluation

- a) **Opening of Financial Bids:** The financial bids of bidders whose techno-commercial bids have been technically qualified shall be opened by the Committee on the specified date and time. The opening date and time will be communicated to the prospective bidders via email by NIC.
- b) **Splitting of Items:** Bidders must submit quotations for all items as outlined in Annexure I. Splitting of items or partial bidding is not admissible.
- c) **L1 Calculation:** The lowest bid (L1) will be determined based solely on the basic cost of the equipment. The Annual Maintenance Contract (AMC), being optional, shall not be considered when calculating the L1 price.
- d) **Criteria for Contract Award:** Being the lowest bidder (L1) is not the sole criterion for the award of the contract. The feasibility of the lowest quoted price will be assessed by the Committee, taking into consideration the relevant rules, terms and conditions outlined in the tender. The Committee's decision in this regard will be final and binding on all parties involved.

Upon completion of the evaluation process, the contract will be awarded to the bidder who quoted the lowest price (L1) and complies with all applicable laws, regulations, and provisions stated in the tender.

- e) **Tie-Breaking Procedure:** In the event that two or more bidders quoted the same prices, the Committee shall decide the L1 bidder based on the following tie-breaking criteria:
 - i. The bidder's turnover for the financial year 2023-24 will be considered first.
 - ii. If the tie persists, the turnover for the financial year 2022-23 will be considered.
 - iii. If further tie-breaking is required, the turnover for the financial year 2021-22 will be considered.
 - iv. If the tie remains unresolved after considering the above financial years, the L1 bidder will be determined by a draw, which will take place in the presence of the concerned bidders. The Committee's decision on this matter shall be final and binding.
- f) **Predatory Pricing / Abnormally Low Bids :** If a tenderer submits a bid with what appears to be predatory pricing or an abnormally low bid, the Tender Evaluation Committee may request a written clarification from the bidder. The bidder will be asked to provide a detailed price analysis, price break-up, or justification of the quoted price, considering the scope, schedule, risk allocation, and any other requirements outlined in the tender documents.

- g) **Failure to Justify Low Bids** If, after reviewing the price analysis or justification, the bidder fails to provide adequate supporting documentation, evidence, or calculations to substantiate the quoted price, the Committee may, at its sole discretion, reject the bid.
- h) **Preference under MSE Policy:** Preferences under the MSME (Micro and Small Enterprises) policy, as applicable according to the Government of India policy / regulations, will be considered during the evaluation process. In the event that the agency with the lowest rate at any stage after award of contract fails to successfully or satisfactorily execute the contract, the contract shall be terminated, and the Bid Security / Performance Security will be forfeited. Additionally, bidders who are exempt from paying Bid Security shall be suspended from participating in future tenders of NIT Rourkela, as decided by the competent authority.
- i) **Negotiations with L1 Tenderer :** If required, negotiations will be conducted with the L1 bidder only. However, all bidders may be required to justify the basis of their quoted prices when requested. If any bidder fails to provide a satisfactory justification or refuses to cooperate, their bid shall be disqualified, and they will not be considered in the re-tendering process.

8. Make in India (MII)

In case the bidder is a Class-I / Class-II in line with the Public Procurement (Preference to Make in India) Order 2017 No. P45021/2/2017-PP (BE-II) dated 04 Jun 2020 as amended from time to time, there shall be a preference to local suppliers towards preference to make in India. A Self Declaration Certificate regarding "Class-I/Class-II" for the tendered items as per the **Annexure – VI** is to be submitted by the bidder.

As per the OM of Department of Promotion for Industry and Internal Trade No. P-45021/102/2019-BE-II-Part (1) dated: 04.03.2021. The bidders can't claim themselves as Class-I local suppliers/Class-II local suppliers by claiming the services such as transportation, insurance, installation, commissioning, training and after sales service support like AMC/CMC etc. as local value addition.

- a. 'Local Content' means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all custom duties) as a proportion of imported content in the item (including all custom duties) as a proportion of the total value, in percent.
- b. 'Class-I local supplier' means a supplier or service provider, whose goods, services or works offered for procurement, has local content equal to or more than 50% as defined under this order.
- c. 'Class-II local supplier' means a supplier or service provider, whose goods, services or works offered for procurement, has minimum local content of 20% but less than 50%, as defined under this order.
- d. 'Non-local supplier' means a supplier or service provider, whose goods, services or works offered for procurement, has local content less than 20%, as defined under this order.
Complaint redressal mechanism: In case any complaint received by the procuring agency or the concerned Ministry/Department against the claim of a bidder regarding local content/domestic value addition in an electronic product, the same shall be referred to STQC.
- e. The bidder shall be required to furnish the necessary documentation in support of the domestic value addition claimed in an electronic product to STQC. If no information is furnished by the bidder, such laboratories may take further necessary action, to establish the bonafides of the claim.
- f. A complaint fee of Rs. 2 lakh or 1% of the value of the domestically manufactured products being procured (subject to a maximum of Rs.5 lakh), whichever is higher, to be paid by Demand Draft to be deposited with STQC. In case, the complaint is found to be incorrect, the complaint fee shall be forfeited. In case, the complaint is upheld and found to be substantially correct, deposited fee of the complainant would be refunded without any interest.

False declarations will be in breach of the Code of Integrity under Rule 175 (1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.

9. Purchase Preference to Make in India

- a. Subject to the provisions of this Order and to any specific instructions issued by the Nodal Ministry or in pursuance of this Order, purchase preference shall be given to 'Class-I local supplier' in procurements undertaken by procuring entities in the manner specified here under.

- b. In the procurements of goods or works which are divisible in nature, the 'Class-I local supplier' shall get purchase preference over 'Class-II local supplier' as well as 'Non-local supplier', as per following procedure:
 - i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'Class-I local supplier', the contract for full quantity will be awarded to L1.
 - ii. If L1 bid is not a 'Class-I local supplier', 50% of the order quantity shall be awarded to L1. Thereafter, the lowest bidder among the 'Class-I local supplier' will be invited to match the L1 price for the remaining 50% quantity subject to the Class-I local supplier's quoted price falling within the margin of purchase preference, and contract for that quantity shall be awarded to such 'Class-I local supplier' subject to matching the L1 price. In case such lowest eligible 'Class-I local supplier' fails to match the L1 price or accepts less than the offered quantity, the next higher 'Class-I local supplier' within the margin of purchase preference shall be invited to match the L1 price for remaining quantity and so on, and contract shall be awarded accordingly. In case some quantity is still left uncovered on Class-I local suppliers, then such balance quantity may also be ordered on the L1 bidder.
- c. In the procurements of goods or works, which are not divisible in nature, and in procurement of services where the bid is evaluated on price alone, the 'Class-I local supplier' shall get purchase preference over 'Class-II local supplier' as well as 'Non-local supplier', as per following procedure:
 - i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'Class-I local supplier', the contract will be awarded to L1.
 - ii. If L1 is not 'Class-I local supplier', the lowest bidder among the 'Class-I local supplier', will be invited to match the L1 price subject to Class-I local supplier's quoted price falling within the margin of purchase preference ($L1 + 20\%$), and the contract shall be awarded to such 'Class-I local supplier' subject to matching the L1 price. iii. In case such lowest eligible 'Class-I local supplier' fails to match the L1 price, the 'Class-I local supplier' with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the 'Class-I local supplier' within the margin of purchase preference matches the L1 price, the contract may be awarded to the L1 bidder.
- d. "Class-II local supplier" will not get purchase preference in any procurement, undertaken by procuring entities.
- e. **Margin of Purchase Preference: The margin of purchase preference shall be 20%.**

10. Purchase Preference to Micro and Small Enterprises (MSEs)

Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail the Purchase preference, the bidder must be the manufacturer of the offered product in case of bid for supply of goods. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service.

- i. In case L1 is not an MSE and MSEs quoting price within the band of $L1 + 15\%$ shall also be allowed to supply a portion of requirement by matching their price to L1 price in a situation where L1 price is from someone other than an MSE. Such MSEs shall be allowed to supply at least 25% of total tendered value in case of divisible item (or 100% in case order quantity is not divisible).
- ii. In case L1 is not an MSE and there is more than one MSE within the range of $L1 + 15\%$, only the lowest MSE shall be considered for 25% order in case of divisible item (or 100% in case order quantity is not divisible), subject to matching the L1 prices. Only on refusal of such lowest MSE to accept L1 price, second lowest MSE within the range of $L1 + 15\%$, shall be considered. This process shall be continued till a MSE in the range accepts the L1 price or the MSEs in the $L1 + 15\%$ range are exhausted. In case no MSE accepts the L1 price or there is no MSE available, in $L1 + 15\%$ range, then the order shall be placed without applying this principle.

SECTION – II: COMMERCIAL TERMS AND CONDITIONS

1. Code of Integrity

All bidders are required to adhere to the Code of Integrity for Public Procurement in accordance with the regulations issued by the Government of India. Any violation of this code may lead to punitive actions, including contract cancellation, banning, blacklisting, or other actions initiated by NIT Rourkela as per extant rules.

2. Inspection and Site Visit

The Tenderer is encouraged to conduct a site visit and thorough inspection of the project site before submitting the tender. The Tenderer shall make arrangements with the Employer/Client to visit the site at a mutually agreed time prior to the tender submission deadline. All costs associated with the site visit, including travel and accommodation, shall be borne by the Tenderer.

3. Prices

The price should be quoted in net per unit and must include all packing, delivery, installation, commissioning, demonstration, training and all charges required to set up the Equipment at CRF, NIT Rourkela. The price shall be quoted separately for equipment and CAMC in the BOQ.

If, in the price structure quoted for the required goods, there is a discrepancy between the unit price and total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail, and the total price corrected accordingly.

If there is an error in a total corresponding to the addition or subtraction of the sub-totals, the sub-total shall prevail, and the total shall be corrected.

4. Payments

Unless otherwise stipulated in the Purchase Order, the NITR shall make payment within thirty (30) Days of the later of:

- a. 100% payment shall be made after successful delivery, installation, testing, commissioning, and training of the items.
- b. Receipt of shipping documents and any other documents specified in the Contract; and Receipt of the original tax invoice issued by the Contractor.
- c. Original Tax invoices (in triplicate) shall be in original and shall contain the NITR Purchase Order number, and a description, the quantities, unit and total price(s) of the Goods delivered. The currency of the invoice and payment shall be as specified in the Purchase Order.
- d. Payments shall be made in the currency stated in the Contract / PO, on the basis of the equivalent value of INR on the day of payment and paid directly into the nominated bank account.
- e. The NITR shall not pay any charge for late payments.

5. Delivery period

The goods are required to be delivered and successfully installation & commissioning at CRF NIT, Rourkela within **8 months** i.e. **240 Days** from the date of placement of Purchase 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.

6. Delivery and take-over of goods

The Contractor shall deliver the Goods at the Place(s) of Delivery. On behalf of the NIT Rourkela, a duly authorized representative(s), shall take-over the Goods upon delivery. Take-over of the Goods by the NITR shall not be deemed acceptance of the Goods by the NITR. The time of delivery as specified in the Contract / PO shall be strictly adhered to, and time shall be of the essence.

7. Installation, Demonstration and Training

The supplier is required to install, demonstrate and provide the training of the equipment within four weeks of the arrival of materials at the NIT Rourkela site of installation, otherwise the penalty clause will be the same as per the supply of materials.

In case of any mishappening / damage to the items and supplies during the carriage of supplies from the origin of equipment to the place of installation, the supplier has to replace it with new equipment/supplies immediately at his own risk and cost. Supplier will settle his claim with the

insurance company as per his convenience. NIT Rourkela shall not be liable to any type of losses in any form.

8. **Application Specialist:** The Tenderer should mention in the Technical bid the availability and names of Application specialist and Service Engineers in the nearest regional office.
9. **Spares:** The supplier is required to provide state of availability of spares for ten years, if required.

10. Packing

- a. The Goods shall be packed and marked in a proper manner and in accordance with the Contract and any statutory requirements and any requirements of the carrier(s). In particular, the Goods shall be marked with the NITR Purchase Order number and the net, gross and tare weights, the name of the contents shall be clearly marked on each container and all containers of hazardous goods (and all documents relating thereto) shall bear prominent and adequate warnings.
- b. The Contractor shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination. The packing shall be sufficient to withstand, without limitation, rough handling during transit. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the final destination and the absence of appropriate handling facilities at all points in transit.
- c. All packaging materials shall be non-returnable.

11. Delivery and Documents

Delivery of the goods should be made within **8 Months** from the date of the issue of Purchase Order. Within 24 hours of shipment, the supplier shall notify the purchaser and the insurance company by email of the full details of the shipment, including contract number, railway receipt number/ AAP, etc. and date, description of goods, quantity, name of the consignee, invoice, etc. The supplier shall mail the following documents to the purchaser, with a copy to the insurance company:

- a. 2 Copies of the Supplier Tax Invoice showing contract number, goods' description, quantity, Unit price, total amount;
- b. Insurance Certificate, if applicable;
- c. Manufacturer's/Supplier's warranty certificate, if applicable;
- d. Inspection Certificate issued by the nominated inspection agency, if any;
- e. Supplier's factory inspection report; and
- f. Two copies of the packing list identifying the contents of each package.

The above documents should be received by the Purchaser before arrival of the Goods (except where the Goods have been delivered directly to the Consignee with all documents) and, if not received, the Supplier will be responsible for any consequent expenses.

12. Warranty

- a. The Contractor warrants that the Goods furnished under the Contract conform to the technical specifications, description and standards specified in the Contract, and are new and unused, and free from defects in design, workmanship and/or materials.
- b. The Contractor shall provide a comprehensive warranty for the Goods for a period of **three (03) years** from the date of acceptance of the Goods by the NITR, unless the standard manufacturer's warranty period is longer in which case the longer period shall apply.
- c. Post warranty, 3 years Comprehensive Maintenance Contract (CMC) has to be provided.

13. Liquidated Damages

The liquidated damages shall be levied, for delay in supply beyond the contractual delivery date at the rate of 0.5% per week of delay or part thereof on delayed supply of goods and / or services until actual delivery or performance subject to a maximum of 10% of the contract price of the equipment the delivery of which is delayed, for each month or part of a month.

14. Acquaintance with Local Conditions and Factors

The Bidder, at his own cost, responsibility, and risk, is encouraged to visit, examine, and familiarize himself with all the site/ local conditions and factors. The Bidder acknowledges that before the submission of the bid, he has, after a complete and careful examination, made an independent evaluation of the Site/ local conditions, the legal, environmental, infrastructure, logistics, communications and any other conditions or factors of which would have any effect on the price to be quoted by him or affecting performance/ completion of the contract.

All expenses incurred by the bidder in connection with obtaining information for submitting this tender including their sites visit or efforts in compiling the tender shall be borne by the bidder and no claims for reimbursement thereof shall be entertained.

Bidders shall themselves be responsible for compliance with Rules, Regulations, Laws and Acts in force from time to time at relevant places. On such matters, the Procuring Entity shall have no responsibility and shall not entertain any request from the bidders in these regards.

15. Bid Validity

Bids shall remain valid for a period not less than **120 days** from the date of opening of technical bid. Bid valid for a shorter period shall be rejected as nonresponsive.

In case the day up to which the bids are to remain valid falls on/ subsequently declared a holiday or closed day for the Procuring Entity, the bid validity shall automatically be deemed to be extended up to the next working day.

In exceptional circumstances, before the expiry of the original time limit, the Procuring Entity may request the bidders to extend the validity period for a specified additional period. The request and the bidders' responses shall be made in writing or electronically.

16. Modification, Resubmission and Withdrawal of Bids

Once submitted in e-Procurement, Bidder cannot view or modify his bid since it is locked by encryption. However, resubmission of the bid by the bidders for any number of times superseding earlier bid(s) before the date and time of submission is allowed. Resubmission of a bid shall require uploading of all documents, including financial bid afresh. The system shall consider only the last bid submitted as the valid bid.

No bid should be withdrawn after the deadline for the bid submission and before the expiry of the bid validity period. If a Bidder withdraws the bid during this period, the Procuring Entity shall be within its right to enforce Bid Securing Declaration (in lieu of forfeiture of the Bid Security), in addition to other punitive actions as decided by Institute for such misdemeanour.

17. Cartel Formation / Pool Rates

Unless the Procuring Entity decides this to be a case of Cartel/ Pool Rates, if more than one bidder quote the same total evaluated price, then the Procuring Entity reserves its right to distribute unequal quantities among the bidders - excluding one or more bidders, based on considerations like performance/ financial capabilities, the distance of destination godowns from the location of the factories, production capacities, any extra features/ benefits offered etc.

If Procuring Entity decides this to be a case of Cartel/ Pool Rates, leading to “Appreciable Adverse Effect on Competition” (AAEC) as identified in Competition Act, 2002, as amended from time to time, it reserves its rights to:

- a. order any quantity on any one or more bidders without assigning any reason thereof.

And/ or

- b. consider it as a violation of the Code of Integrity and reject the bid(s) as nonresponsive in addition to other punitive actions as decided by Institute. In addition to such remedies, the Procuring Entity also reserves the right to refer the matter to the Competition Commission of India (CCI) for obtaining necessary relief. In addition, the attention of the bidders is drawn to Chapter VI of the “The Competition Act 2002”, which deals with Penalties. Such actions shall be in addition to other rights and remedies available to the Procuring Entity under the contract and Law.

18. Price Negotiation

Usually, there shall be no price negotiations. However, the Procuring Entity reserves its right to negotiate with the lowest acceptable bidder (L-1), who is techno-commercially suitable for supplying bulk quantity and on whom the contract would have been placed but for the decision to negotiate.

19. Letter of Award (Acceptance – LoA)

The Bidder, whose bid has been accepted and documents verified (at the discretion of Procuring Entity), shall be notified of the award by the Procuring Entity before the expiration of the Bid-Validity period by written or electronic means. The Letter of Award (LoA) shall constitute the legal formation of the contract, subject only to the furnishing of performance security as per the provisions of the sub-clause below. The Procuring Entity, at its discretion, may directly issue the contract subject only to the furnishing of performance security, skipping the issue of LoA.

20. Performance Security / Security Deposit

Successful bidder will have to deposit 5% of tender contract value after AOC drawn, within 15 days through ONLINE mode using NET-BANKING / NEFT / RTGS / IMPS or payment online in an acceptable form. Performance Security will remain valid for period of 60 days beyond the date of completion of all contractual obligations of the suppliers including warranty obligation. Earnest Money Deposit (EMD) shall be returned the after submission of PS / SD, in case of award of contract to the successful bidder.

SECTION – III: GENERAL TERMS AND CONDITIONS

21. Definitions

1. **Approved** means approved in writing, including confirmation of previous verbal approval.
2. **Competent Authority** means the Director, NIT Rourkela or any officer authorized in this regard.
3. **Contract** means the Invitation to Tender, Instructions to Tenderers, General Conditions of Contract, Special Conditions of Contract, Scope of Work showing approximate quantities, tender submitted by the tenderer including his price offer, Performance Guarantee Bond and other Bonds, Letter of Acceptance, Work Order and any communication having the effect of amendment of the contract, and the contract agreement, unless otherwise specified.
4. **Contract Rate / Price** means the sum named in the tender that has been accepted subject to such additions thereto or deductions therefrom as may be made during the tender evaluation or thereafter.
5. **Contractor or Agency or Firm or Company** means “The Tenderer” whose tender has been accepted and includes the Contractor’s authorized representative, successors, permitted assignees and legal heirs.
6. **Director** means and includes the Director of NIT Rourkela or his authorized representative.
7. **Duration of Contract / Contract Validity** means the period stipulated in the contract or work order and includes any extended period thereof, if any made through a written communication.
8. **NITR** means National Institute of Technology, Rourkela represented through an authorized officer for this contract or Director as the case may be.
9. **Authorized officer / Representative** means and includes Asst. Registrar, Deputy Registrar, Registrar, Dean and Warden, HOD of NIT authorized or designated for this contract.
10. **Institute** means National Institute of Technology Rourkela. (in short NITR).
11. **Notice in writing or written notice** including notice in digital mode means a notice in written, typed, or printed characters sent or emailed (unless delivered personally or otherwise proved to have been received) by registered post/courier (with POD) to the notified address or the Registered office of the addressee, or the contractor’s site office and shall be deemed to be sufficient service if so sent or left at that address.
12. **Terms and Conditions** means the General terms and Conditions of the Contract (GCC) herein mentioned and other stipulations incorporated in any part of the tender document and/or agreement.
13. **Tender** means an offer against enquiry/advertisement/Notice Inviting Tender submitted by the tenderer in a single part or multiple parts like Techno-commercial part, price bid part.
14. **Tenderer** means and includes the person or firm or company who has submitted a valid tender and also includes its authorized representatives, heirs, executors, administrators, successors, and assignees as approved by the employer.
15. **Work** means all work given in the Scope of Work in the tender documents and includes any associated work required for the fulfillment of the Scope of Work and as set forth and required by the specifications and such additional instructions issued from time to time during the progress of the work.

22. Contract Documents

1. Documents mutually explanatory: The several documents forming the contract are to be taken as mutually obligatory of one another, and interpreted harmoniously, and in case of ambiguities or discrepancies, the same shall be clarified by NIT who shall thereupon issue to the contractor instructions / directions indicating the manner in which the work is to be carried out.
2. Further instructions: The representative of NIT shall have full power and authority as delegated to him to issue to the contractor, from time to time during the progress of the work, such further instructions as shall be necessary for the purpose of proper and adequate execution of the work and the Contractor(s) shall carry out and be bound by such further instructions

23. Force majeure

On the occurrence of any unforeseen event, beyond the control of either Party, directly interfering with the delivery of Services arising during the currency of the contract, the affected Party shall, within a week from the commencement thereof, notify the same in writing to the other Party with reasonable evidence thereof.

If the force majeure condition(s) mentioned above be in force for 90 days or more at any time, either party shall have the option to terminate the contract on expiry of 90 days of commencement of such force majeure by giving 14 days' notice to the other party in writing. In case of such termination, no damages shall be claimed by either party against the other, save and except those which had occurred under any other clause of this contract before such termination.

24. Assignment and Sub-contracting

1. The Contractor shall not assign, transfer, pledge or make other disposition of the Purchase Order or any part thereof or of any of the Contractor's rights, claims or obligations under the Purchase Order except with the express written consent of the NITR. Any assignment made without such consent shall be void and of no effect.
2. The NITR may require the Contractor to furnish particulars of the proposed subcontract as the NITR deems necessary. The NITR's approval of any subcontracting shall not relieve the Contractor from any liability or obligation under the Contract. In any subcontract, the Contractor agrees to bind the subcontractor by the same terms and conditions by which the Contractor is bound under the Contract / PO.

25. Termination of Default and Damages

1. The NITR shall have the right to terminate the Purchase Order or any of the provisions thereof at any time by serving a three days' notice to the Contractor.
2. If due to reasons attributable to the Contractor, the Contractor fails or refuses to:
 - a. deliver any or all of the Goods under the Purchase Order.
 - b. comply with any or all of the terms and conditions set out in the Purchase Order; or
 - c. deliver any or all of the Goods under the Purchase Order on or before the Delivery Date; the NITR may hold the Contractor in default under the Purchase Order.
3. When the Contractor is thus in default, the NITR may, by written notice to the Contractor, immediately terminate the Purchase Order in whole or in such part or parts thereof in respect of which the Contractor is in default.
4. The NITR may, at its discretion, impose penalties upon the Contractor calculated in accordance with clause 9 of Section - II for each Day the Contractor is late in delivering the Goods past the Delivery Date initially specified in the Purchase Order.
5. If the Contractor does not remedy its default within the period accorded under clause 9 of Section - II, the NITR may, by written notice to the Contractor, terminate the Purchase Order with immediate effect.
6. Upon any termination of the Purchase Order, in whole or such part(s) thereof in respect of which the Contractor is in default, the NITR may engage another contractor to deliver the Goods and recover any difference in price and any additional costs from the Contractor.
7. The Contractor shall indemnify the NITR for all losses, charges, costs and expenses, which the NITR may suffer or incur as a result the Contractor's default, including those resulting from engaging another contractor pursuant to this clause.

26. Discretion and Confidentiality

The Contractor is required to exercise the utmost discretion in all matters relating to the Contract / Purchase Order. Unless required in connection with the performance of the Purchase Order or expressly authorized in writing by the NITR, the Contractor shall not disclose at any time to any third party any information which has not been made public and which is known to the Contractor by reason of its association with the NITR. The Contractor shall not, at any time, use such information to any private advantage. These obligations do not lapse upon any completion, expiration, cancellation or termination of the Contract / PO.

27. **Fall Clause:** In case the supplier supplies or quoted the same product at a lower rate to other Governments, public sector or private organizations, the supplier would reimburse the excess to NIT Rourkela.

28. Acceptance and Rejection of Bids

The Committee or the Institute reserves the rights to cancel / reject any or all bids, or cancel the tender process, or issue another identical tender for similar service without assigning any reason thereof.

29. Arbitration

All disputes or differences of any kind whatsoever arising out of or in connection with the contract work during the subsistence of the contract or otherwise, shall be governed by the provisions of ARBITRATION AND CONCILIATION ACT, 1966 and any statutory rules/amendments thereof.

30. Cancellation of Tender

Notwithstanding anything specified in this tender document, NIT Rourkela at its sole discretion without assigning any reasons, reserves the rights.

- a. To accept or reject the lowest bidder or any other bidder or all the bidders.
- b. To accept any bid in full or in part.
- c. Float/ initiate a parallel tender for identical requirements.
- d. Cancel the tender at any stage.

31. Jurisdiction and Right to Amend Rules

1. The Institute reserves the right to amend the rules whenever and wherever considered necessary & appropriate. The same shall be intimated to the firm in due course of time which shall be final and binding on the firm.
2. The Institute rules shall be binding for the execution of the contract. If differences persist ever after arbitration & there are compelling reasons to go to the court, it will be decided in the Courts having jurisdiction over Rourkela.

32. INTEGRITY PACT:

1. The integrity pact (IP) envisages an agreement between the prospective bidders/ vendors with the buyer committing the persons/ officials of both the parties with the aim not to exercise any corrupt influence on any aspect of the contract shall be applicable for the tendered item. Only those bidders/ vender who are willing to enter into such an integrity pact with the purchaser would be competent to participate in the bidding. In other words, entering into this Pact would be a preliminary qualification. The bidder should give self-declaration certificate for acceptance and compliance with the Integrity Agreement.
2. Any violation of the Integrity Pact would entail disqualification of the bidders and exclusion from future business dealings, as per the existing provisions of GFR, 2017, PC Act, 1988, and other Financial Rules/Guidelines, etc. as may be applicable to the organization concerned.
3. The integrity pact would be effective from the date of invitation of bids till the complete execution of the contract.
4. The model format of Integrity Pact (IP) is at **Annexure-VII**.

Technical Specification of X-Ray photo electron Spectroscopy

Sl. No.	Description	specification
1.	Smallest X-ray beam spot Size	20 microns or better
2.	X-Ray Power	300Watt or Better
3.	Spatial Resolution of chemical state XPS imaging/mapping	3 microns or better
4.	Maximum Energy Resolution	0.48 eV or better
5.	XPS Elemental Sensitivity and energy resolution for large area analysis	To be specified by the supplier for 0.48 eV and 0.6 eV.
6.	XPS Elemental Sensitivity and energy resolution for 10 microns X-ray Beam spot size	To be specified by the supplier for 0.48 eV and 0.6 eV.
7.	XPS Energy Resolution	0.85 eV O-C=O 80 KCPS
8.	X-ray monochromator Rowland circle	500 mm or more
9.	X-ray anode source	Monochromatic dual anode X-ray source Al/Cr, Al/Ag or equivalent hard x-rays to be quoted.
10.	Energy Analyzer and Radius	Analysis chamber must be made of Mu metal materials to obtain UHV and shield from magnetic fields, radius 150 mm or large
11.	The Monoatomic Ion gun	The Monoatomic Ar ion gun should provide ions with energy range variable between 0.5eV to 5 keV.
12.	Detector	The system must have 128 or more channel detectors for high resolution spectroscopy (XPS, AES, UPS, etc) as well as high resolution spatial imaging mode. Proper provision for differential Pumping of X-ray unit and UV-lamp unit to maintain the pressure while switching from one source to another.
13.	Sample Transfer Mechanism	Completely automatic sample transfer from Introduction Chamber to Analysis Chamber without any manual intervention.
14.	Sample Stage	Automated five axis X,Y,Z, θ , Φ precision manipulator system for translation of the sample holders. θ X-rotation $\pm 90^\circ$ or better.
15.	Vacuum	After baking for 48 hours, this must be guaranteed to attain pressure order of 10^{-10} torr or better.
16.	Calibration Standard	Standard samples (Ag, Au, Cu and PET) must be provided to check the system calibration, resolution, sensitivity, etc. Phosphorescent sample for X-ray spot alignment should be included.
17.	Parking stations	The system should be equipped with parking stations for faster throughput.
18.	Design	More ergonomic and compact design. Less space required. 3.4-meter x 3.95 meter.
19.	Upgradability	The system should be upgradable to a higher energy XPS, heat – cool attachment, IPES [Inverse Photo Electron Spectroscopy], Auger Electron Spectroscopy [AES], REELS, ISS etc.

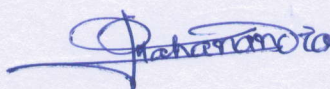
20. Highly automated, XPS instrument with optional multi- technique configurations using a scanned, focused, monochromated X-ray beam specifically designed for spatially resolved chemical state analysis.
21. The system must be a new and latest, completely functioning X-ray Photoelectron spectroscopy (XPS) instrument.
22. Instrument should have the features to conduct XPS experiments including imaging, spectra acquisition (survey and narrow) and depth profiling. It should be able to perform analysis on samples of semiconductors, metals, alloys, ceramics, glasses, polymers, organic compounds, biomaterials, magnetic materials and insulators. The UHV system may have a two-chamber configuration, consisting of an analysis chamber and sample introduction chamber.
23. Should be provided with a camera that gives a global view of the sample holder.
24. A scanning, monochromatic X-ray source with a focused beam (<5 μm to 300 μm) for rapid X-ray induced secondary electron imaging (SXI) chemical state imaging or a system should have high resolution parallel imaging.
25. A vertically mounted 180° hemispherical electron energy analyzer radius 150 mm or large. five axis software driven motorized sample stage.
26. Automated sample transfer and stage control are fully integrated into operational software for easy sample navigation to locate analysis positions.
27. Two or more parking positions for the holders are available in the analysis. Analysis chamber made of Mu metal suitable materials to obtain UHV and shield from magnetic fields. Chamber must have continuous automated measurement.
28. The vacuum processing required to introduce a sample holder is under software control and in-vacuum movement of sample holder is performed by a robotic arm. The robotic arm can access the sample introduction chamber, sample stage, and the three in-vacuum parking positions.
29. Multiple sample viewing capabilities with UHV compatible analysis chamber.
30. State-of-the-art electronics with reliable USB communication and data streaming directly to the system PC featuring software energy scale calibration; voltage readout in software for remote diagnostics; low system overhead during data acquisition; and real-time display of data and acquisition status.
31. Operational software for full analytical capability including surveys, high-resolution multiplexes, sputter depth profiles, line scans, chemical images, angle dependent XPS, automated analyses and user-defined settings.
32. Extensive library of post-analysis data processing algorithms including: atomic concentration quantification, background subtraction, smoothing, peak identification, linear least squares fitting, target factor analysis, curve and peak analysis and separation of multiple chemical states in maps, line scans and profiles.
33. **A computer system:** Includes Intel core-i7,13th Generation,16Gb RAM,1 NUMeMZ+SSD, Keyboard,Mouse, Blue Tooth,Wi-Fi,Windows 11,32IPS inch Monitor with 3 years Warranty by OEM, A recordable/erasable DVD drive, One 5 TB external hard disc and a standard Laser Printer for dual printing. May be provided locally.
34. Instruction manuals and system maintenance tool kit, A closed loop water chiller.
35. System assembly, system startup and performance verification followed by three days of operational training, and a two-years warranty.
36. All software related to XPS operation.
37. Instrument should be capable of performing photoemission measurements on multiple points on the sample with small spot/aperture size of 20 μm or better.
38. Instrument should be equipped with robust charge neutralization setup,with minimum adjustable parameters and should be software controlled to measure spectra on insulating, metallic and electrically isolated samples.
39. System should be fitted with automated five axis X, Y, Z, θ , Φ precision manipulator system for translation of the sample holders, its rotation, etc.
40. A software controlled, variable, fine focused inert gas (Ar, He, Ne, Xe) ion source must be provided for surface cleaning and high speed depth profiling. Suitable gas admittance system, differential pumping and source power supply must be supplied. The System should be capable of integrating high-performance ion gun, utilizing Argon gas, which is capable of

operating in both cluster and ion mode for depth profiling and surface cleaning of both soft and hard materials. The outcome energy from Ar⁺ cluster mode should be variable from 1eV to 80 eV or greater per atom. Clear evidence must be provided.

41. Ar⁺ ion source should be capable of surface cleaning and should be used for depth profiling experiment. Depth profiling and photoemission measurements (using x-ray and UV source) should be synchronized and automated.
42. Optical imaging of the entire sample holder in load lock with zoom in/ High magnification option should be provided for easy identification of spot at which measurement is desired. Optical Imaging of the sample in the analysis chamber should be provided.
43. Software controlled focus, auto Z axis optimization and coordinated control of analyzer and manipulator using the optical image is a must. System should also be capable of sequential selection of multiple samples for analysis, placed on a single sample holder automatically.
44. The system must include automated features for sample handling, vacuum control and data acquisition allow a spectrometer to be operated in a multi user environment along with other analytical techniques. To meet these requirements the spectrometer should include the following functions.
 - Automated sample transfer.
 - Automated vacuum control and gas handling.
 - Automatic sample height adjustment.
 - Automatic data acquire for wide scan survey spectroscopy and high-resolution narrow scan data.
 - Automatic data interpretation and quantification
 - Automatic data reporting
 - Automatic calibration.
 - Facility to load multi samples at a time
45. Load lock door mechanism should be fully automated and pneumatically controlled through the data system with Door open/close detection.
46. Transfer of the sample holder into the analysis chamber should be fully automated and integrated into the spectrometer's vacuum control software to preserve UHV conditions.
47. Sample transfer should be fully automated for all types of sample holders including vacuum transfer module.
48. A combination gauge should be supplied to measure the chamber pressure both in low and ultra-high vacuum ranges.
49. The base pressure after baking and cooling must be guaranteed at 5×10^{-9} mbar or better for ultra-high vacuum (UHV) surface analysis.
50. Sample insertion must be through an entrance or introduction chamber. It should allow automated rapid introduction of samples into the main analysis chamber with no manual intervention.
51. Both the chambers (Introduction & Analysis) should have vacuum gauges that can be read both atmospheric and ultrahigh vacuum from the computer.
52. It must have a high-quality optical camera to view the analysis position on the sample which should have:
 - A full sample view for sample-to-sample translation.
 - A real-time magnified image of the sample giving a plan view of the sample.
 - A higher magnification microscope camera for accurate sample height setting.
 - A rapid mapping capability that can generate fast XPS images which can be used to define analysis positions.
 - The instrument must be equipped with an excellent charge neutralization system by using both low energy electrons and ions.

53. Mode of analysis

The system should be able to perform the below experiments:



- XPS survey scan and narrow scan
- Small spot and large area analysis
- Depth profile experiments.
- Angle-dependent XPS analysis for ultra-thin film analysis.

54. Calibration and alignment

The instrument must include permanent standards and apertures as well as software to acquire and process the data. The instrument should offer auto calibration for the following functions:

- Energy scale linearity
- Transmission function
- Ion gun modes tuning and alignment
- Electron lens optimization
- Detector optimization

55. System software

- The data system should include a comprehensive package of data acquisition and processing software for XPS, including depth profiling, line scans and maps.
- A built-in database of XPS information and spectra should be included.
- The data system should include routines for automatic data acquisition and reporting.
- Simple pasting of data, tables, charts, and images from the data system into other applications must be facilitated.
- All parameters and the sequence of tasks must be possible to be pre-defined by the user.
System should be provided with an offline processing license.

56. Accessories

- The instruments should be delivered with all accessories and spares necessary to make it fully operating.
- The bake-out shielding should be integrated into the system housing without the need for additional baking tents or panels. All cables connected to the main body of the system should be designed to withstand the bake out temperatures allowing them to remain in place during the system bake out.
- Bakeout should be hassle free, the system should be baked even with remote access on the data system. The heating filaments/units while baking should not require any human interference.

57. Protection

- A set of safety features like high voltage, coolant, vacuum, and mechanical interlocks must be equipped.

58. Manual

- A complete instruction manual in English in electronic version must accompany the equipment.

59. UV Photoelectron Spectroscopy

- UV Photoelectron Spectroscopy with two separate high-precision gas admission valves for Helium I and Helium II.
- The data system must be able to start the lamp and operate in He(I) or He(II) modes.
- A gas discharge source capable of operating with noble gases must be supplied.
- All differential pumping, gas handling and source operation should be software-controlled so that it can be operated from the data system, and used within complex experiments such as depth profiles.
- The standard operation must be configured for use with helium, with the data system able to automatically start the lamp and operate in He(I) or He(II) modes.

60. Training

Training should be provided at free of cost at site of installation.

UPS performance must be demonstrated on a clean silver sample. Under identical spectroscopic conditions, a count rate of ≥ 2 Mcps must be demonstrated when the resolution at the Fermi edge is ≤ 120 meV.

61. Vacuum Transfer Module

- Sample holder allowing samples to be transferred under vacuum into the system.
- Samples can be prepared in an inert environment, put into the holder, pumped down (pump not included) and then transferred into the K-Alpha under vacuum.
- Set of sample clips.

62. Online UPS: A Standard 10 kVA online UPS with battery at least for 30 minutes of Backup.

63. AERB Compliance, Permission, and Certification Requirements:

As the equipment falls under the radiation – generating category, it must comply with all applicable regulations stipulated by the Atomic Energy Regulatory Board (AERB), Government of India.

Supplier Scope:

The supplier is responsible for ensuring the following:

A. AERB Clearance:

Obtain necessary AERB approval and clearances for the supply and installation of equipment at NIT Rourkela.

B. Decommissioning Plan and Undertaking:

Provide a decommissioning-cum-undertaking as part of bid

This includes:

- Estimated cost of decommissioning.
- A comprehensive decommissioning plan.
- Undertaking that the supplier will manage the complete decommissioning process.

At the end of the equipment's service life, NIT Rourkela will notify the supplier, who must then:

- Obtain necessary approvals from the relevant authorities during that period/time.
- Execute decommissioning process in full compliance with regulations.

C. Radiation Safety Compliance:

Ensure the radiation levels of the equipment are within AERB permissible limits.

D. Radiation Survey Report:

Submit a Radiation survey report of the supplied equipment after commissioning.

E. Commissioning:

Full installation and commissioning of the equipment at the designated site is under the supplier's scope.

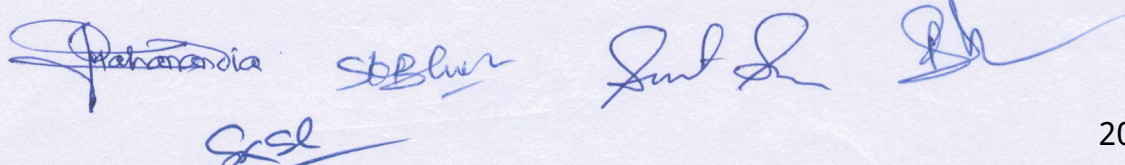
F. Room Layout Compliance:

Provide an equipment room layout (drawing) that complies with AERB guidelines for radiation safety.

G. Site visit upon lowest bidder (L1) selection:

After declared being the L1 bidder, the supplier must visit NIT Rourkela to:

- Advise on the radiation room layout.
- Ensure alignment with AERB regulatory requirements.



COMPLIANCE SHEET

Sl. No.	Description	Compliance (Yes /NO)
1.	Smallest X-ray beam spot Size	
2.	Spatial Resolution of chemical state XPS imaging/mapping	
3.	Maximum Energy Resolution	
4.	XPS Elemental Sensitivity and energy resolution for large area analysis	
5.	XPS Elemental Sensitivity and energy resolution for 10 microns X-ray Beam spot size	
6.	XPS Energy Resolution	
7.	X-ray monochromator Rowland circle	
8.	X-ray anode source	
9.	Energy Analyzer and Radius	
10.	The Monoatomic Ion gun	
11.	Detector	
12.	Sample Transfer Mechanism	
13.	Sample Stage	
14.	Vacuum	
15.	Parking stations	
16.	Design	
17.	Mode of analysis	
18.	Calibration and alignment	
19.	System software	
20.	Accessories	
21.	Protection	
22.	Manual	
23.	UV Photoelectron Spectroscopy	
24.	Training	
25.	Vacuum Transfer Module	
26.	Computer System	
27.	Online UPS	
28.	Upgradation	
29.	Radiation Safety Related	

NOTE: Compliance should be provided till serial 1 to 63 of the technical specification mentioned in Annexure – I.

CHECK LIST FOR BIDDERS

Sl. No.	Particulars	Yes / No
1	Have you filled and signed the details and enclosed relevant documents?	
2	Have you read and understood various conditions of the tender and willing to abide by them?	
3	Have you submitted a tender fee of INR 2500/- through online mode using NET-BANKING or payment online in an acceptable form?	
4	Have you submitted a EMD of INR 15,00,000/- through online mode using NET-BANKING or payment online in an acceptable form?	
5	Have you taken a print of all the sections & annexures of the tender in the prescribed paper size and signed on all pages of the tender document and submitted it in the e-Procurement module of the CPP Portal?	
6	Have you attached proof of having met the eligibility criteria?	
7	Have you attached a self-attested copy of the documents to show the financial status?	
8	Have you attached a copy of the registration certificate with Government bodies like Factory License, OEM authorization, IT, GST, EPFO, ESIC, Labour license, or Legal Entity?	
9	Have you attached a copy of the self-attested purchase order along with satisfactory supplied & installation report (as applicable) issued by the organizations / Govt. Departments or any other reputed PSUs?	
10	Have you attached all the supporting documents along with the technical bid as per clause no. 6 of Section – I?	
11	Have you attached the proof of authorization to sign on behalf of the Bidder?	
12	Has your techno-commercial bid been submitted as per the requirements of the tender?	
13	Is your Price Bid (BOQ) submitted as per the prescribed MS Excel format in the e-Procurement module of the CPP Portal?	
14	Have you submitted the tender documents in two parts with the respective cover in the e-Procurement module of the CPP Portal?	
15	Have you filled and signed the Tender Acceptance Letter (Annexure – III)	
16	Have you filled and signed the Self – Declaration for Non-Blacklisting (Annexure – IV)	
17	Have you filled and signed the Bid Security Declaration (Annexure – V)	
18	Have you filled and signed the Self-Declaration for Local Contents (Annexure – VI)	
19	Have you filled and signed the Integrity Pact (Annexure – VII)	

(On The Letter Head of the Bidder)

(TENDER ACCEPTANCE LETTER)

To

The Registrar

National Institute of Technology Rourkela

Rourkela – 769008

Odisha

Sub: Acceptance of all the terms & conditions of tender.

Ref.: Supply, Installation, Demonstration and Training for Set up of X-ray Photoelectron Spectrometer (XPS) at NIT Rourkela.

1. I/We have downloaded/ obtained the tender document(s) for the above mentioned “Tender/Work” from the CPP Portal or NIT Rourkela web site(s).
2. I/We have carefully read and understood all the terms and conditions of the tender and undertake to abide by them.
3. The information/documents furnished for this tender are authentic to the best of my knowledge and belief.
4. The corrigendum(s) issued from time to time by your department/ organization too have also been taken into consideration, while submitting this acceptance letter.
5. I/We hereby unconditionally accept the tender conditions of above-mentioned tender document(s)/ corrigendum(s) in its totality/entirety.
6. I / We/ are aware of the fact that furnishing of any false information / fabricated documents would lead to rejection of my / our tender at any stage besides any liabilities towards prosecution under the appropriate law.

Thank you.

Yours faithfully,

Authorized Signatory

(Signature with Seal)

Name:

Designation:

Date:

(On The Letter Head of the Bidder)

SELF DECLARATION – NON-BLACKLISTING

To

The Registrar

National Institute of Technology Rourkela

Rourkela – 769008

Odisha

Ref: Supply, Installation, Demonstration and Training of X-ray Photoelectron Spectrometer (XPS) at NIT Rourkela

Dear Sir,

I/We, the undersigned, being the Proprietor/Partner(s)/Director(s)/Authorized Signatory of M/s. _____, having its registered office at _____, do hereby solemnly declare and affirm as follows:

1. **That our firm/company, M/s. _____, has not been blacklisted or debarred** by NIT Rourkela or any other Government Organization / PSU / Central or State Autonomous Body at any time in the past or as on date, from participating in tenders due to any reasons including corrupt or fraudulent practices.
2. **That there is no police case, vigilance inquiry, or court proceedings pending** against the firm or its partners / directors, and we have never been penalized by any Hon'ble Court.
3. **That there are no dues pending** with the Income Tax department and the firm is in full compliance with relevant statutory obligations including Labour Laws.
4. **That our firm/company is not presently debarred or declared ineligible** to participate in the tendering process for any Government / PSU / Autonomous Body in India on the date of submission of this bid.

I/We understand that if any of the information given above is found to be false or misleading at any stage of the tendering process or during the execution of the contract, NIT Rourkela shall be, at its discretion to take appropriate action including forfeiture of Performance Security, cancellation of contract, and debarring our firm from future tenders.

Thank you.

Yours faithfully,

Authorized Signatory

(Signature with Seal)

Name:

Designation:

Date:

(On The Letter Head of the Bidder)

BID SECURITY DECLARATION

To

The Registrar

National Institute of Technology Rourkela
Rourkela – 769008
Odisha

Ref: Supply, Installation, Demonstration and Training of X-ray Photoelectron Spectrometer (XPS) at NIT Rourkela

Dear Sir,

I/We, the undersigned, hereby submit our Bid for the above-mentioned tender and declare the following:

1. I/We understand that, in accordance with the tender terms and conditions, bids must be supported by a **Bid Security Declaration** in lieu of Bid Security (EMD).
2. I/We accept that I/We will be **automatically suspended** from participating in any tender or contract issued by NIT Rourkela for a period of **three (3) years** or as decided by the Institute, starting from the date of bid closure, in the event that we:
 - a) Withdraw our bid during the period of bid validity specified in our Letter of Bid; or
 - b) Having been notified of the acceptance of our bid by NIT Rourkela during the bid validity period:
 - (i) Fail or refuse to execute the contract, or
 - (ii) Fail or refuse to furnish the required Performance Security in accordance with the tender terms.

I/We understand that this declaration shall be binding on us and may be used by the Institute to enforce the above penalty provisions without requiring further notice or legal proceedings.

Thank you.

Yours faithfully,

Authorized Signatory
(Signature with Seal)

Name:

Designation:

Date:

(On The Letter Head of the Bidder)

SELF DECLARATION

[For Local Content of Products]

To,
The Registrar,
National Institute of Technology
Rourkela- 769008, Odisha.

Concerning Order, no P.-45021/2/2017 PP (BE-II) dated 04.06.2020 and No. P-45021/2/2017- PP(BE-II) dated 16-09-2020 of DPIIT, Ministry of Commerce and Industry, Govt. of India, we fall under the following category of supplier (please tick the correct category) for the items for which this tender has been floated and being bided.

Class I local supplier – has local content equal to more than 50%. Local contents added at (name of location local contents are added).

Class II local supplier – has local content of more than 20% but less than 50%. Local contents added at (name of location local contents are added).

Non-local supplier – has local content less than or equal to 20%. Local contents added at..... (name of location local contents are added).

We are solely responsible for the above mentioned declaration concerning the category of supplier. False declarations will be in breach of the Code of Integrity under Rule 175(1) (i) (h) of the General Financial Rules for which we may be debarred for up to 2 years as per Rule 151(iii) of the General Financial Rules along with such other actions as may be permissible under law.

Signature & seal of the company

Name, Designation and address of the organization
.....

Date:

INTEGRITY PACT

(For the use of successful bidder)
(To be submitted on Rs. 100/- stamp paper)

This Agreement (hereinafter called the Integrity Pact) is made on.....day of the month of20....,

between,

The Director, National Institute of Technology Rourkela, in short NITR (hereinafter called the “BUYER / Principal”, which expression shall mean and include, unless the context otherwise requires) of the First Part
And

M/s.represented by Shri....., Authorized Representative (hereinafter called the “BIDDER/Seller/Contractor/applicant.” which expression shall mean and include, unless the context otherwise requires, his successors and permitted assigns) of the Second Part.

WHEREAS the BUYER proposes to procure a and the BIDDER/Seller is willing to offer/has offered the Services and

WHEREAS the BIDDER is a private Company / public Company / Government undertaking/ partnership/ proprietorship/ Joint Venture/Consortium constituted in accordance with the relevant law in the matter and the BUYER is an Autonomous Body under Ministry of Education performing its functions on behalf of the Director, NIT Rourkela.

NOW, THEREFORE,

To avoid all forms of corruption by following a system that is fair, transparent and free from any influence/prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to: -

Enabling the BUYER to complete the desired work at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement and Enabling BIDDERS to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the BUYER will commit to prevent corruption, in any form, by its officials by following transparent procedures. The parties hereto hereby agree to enter into this Integrity Pact and agree as follows:

Section 1 – Commitments of the Principal

- 1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles: -
 - a. No employee of the Principal, personally or through family members, shall in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
 - b. The Principal shall treat all Bidder(s) with equity and reason during the tender process. The Principal shall, in particular, before and during the tender process, provide to all Bidder(s) the same information and shall not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in the tender process or the contract execution.
 - c. The Principal shall exclude from the process all known persons having conflict of interest.
- 2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the relevant anti-corruption laws of India, or if there be a substantive suspicion in this regard, the Principal shall inform the Chief Vigilance Officer and in addition shall initiate disciplinary proceedings.

Section 2 – Commitments of the Bidder(s)/ Contractor(s)

- 1) The Bidder(s)/ Contractor(s) commit themselves to take all measures necessary to prevent corruption. The Bidder(s)/ Contractor(s) commit themselves to observe the following principles during participation in the tender process and the contract execution.

- a. The Bidder(s)/ Contractor(s) shall not, directly or through any other person or firm, offer, promise, or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which they are not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or the execution of the contract.
 - b. The Bidder(s)/ Contractor(s) shall not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal, in violation of the Competition Act, 2002 (as amended from time to time). This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the tender process.
 - c. The Bidder(s)/ Contractor(s) shall not commit any offence under the relevant anti-corruption laws of India; further, the Bidder(s)/ Contractor(s) shall not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals, and business details, including information contained or transmitted electronically.
 - d. The Bidder(s)/Contractors(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly, the Bidder(s)/Contractors(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. Further details, as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers," shall be disclosed by the Bidder(s)/Contractor(s). Further, as mentioned in the Guidelines, all the payments made to the Indian agent/representative must be in Indian Rupees only. Copy of the "Guidelines on Indian Agents of Foreign Suppliers" is placed on Annex hereto.
 - e. The Bidder(s)/ Contractor(s) shall, when presenting their bid, disclose any and all payments made, is committed to, or intends to make to agents, brokers, or any other intermediaries in connection with the award of the contract.
 - f. Bidder(s) / Contractor(s) who have signed the Integrity Pact shall not approach the Courts while representing the matter to IEMs and shall wait for their decision.
- 2) The Bidder(s)/ Contractor(s) shall not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 - Disqualification from the tender process and exclusion from future contracts

If the Bidder(s)/Contractor(s), before award or during execution, has committed a transgression through a violation of Section 2, above or in any other form such as to put their reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/Contractor(s) from the tender process or take action as per laid down procedure to debar the Bidder(s)/Contractor(s) from participating in the future procurement processes of the Government of India.

Section 4 – Compensation for Damages

- 1) If the Principal has disqualified the Bidder(s) from the tender process before the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/ Bid Security.
- 2) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages of the Contract value or the amount equivalent to Performance Bank Guarantee.

Section 5 – Previous transgression

- 1) The Bidder declares that no previous transgressions occurred in the last three years with any other Company in any country conforming to the anti-corruption approach or with any Public Sector Enterprise in India that could justify his exclusion from the tender process.
- 2) If the Bidder makes an incorrect statement on this subject, the Principal shall act like para 2) of Section 4 above.

Section 6 – Equal treatment of all Bidders / Contractors / Subcontractors

In the case of Sub-contracting, the Principal Contractor shall take responsibility for adopting the Integrity Pact by the Sub-contractor.

- a. The Principal shall enter into agreements with identical conditions as this one with all Bidders and Contractors.
- b. The Principal shall disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section 7 – Criminal charges against violating Bidder(s) / Contractor(s) / Subcontractor(s)

If the Principal obtains knowledge of the conduct of a Bidder, Contractor, or Subcontractor, or of an employee or a representative or an allied firm of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal shall inform the same to the Chief Vigilance Officer.

Section 8 – Independent External Monitor

- 1) The Principal shall appoint competent and credible Independent External Monitor(s) for this Pact after approval by the Central Vigilance Commission. The task of the Monitor is to review, independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- 2) The Monitor is not subject to instructions by the parties' representatives and performs their functions neutrally and independently. The Monitor would have access to all Contract documents whenever required. It shall be obligatory for them to treat the information and documents of the Bidder/Contractor(s) as confidential. They report to the Management of the Principal.
- 3) The Bidder(s)/Contractor(s) accepts that the Monitor has the right to access without restriction, all Project documentation of the Principal, including that provided by the Contractor. Upon their request and demonstration of a valid interest, the Contractor shall also grant the Monitor unrestricted and unconditional access to their project documentation. The same applies to Sub-contractors.
- 4) The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/Contractor(s)/ Sub-Contractor(s) with confidentiality. The Monitor has also signed declarations on 'Non-Disclosure of Confidential Information' and 'Absence of Conflict of Interest.' In case of any conflict of interest arising later, the IEM shall inform the Management of the Principal and recuse themselves from that case.
- 5) The Principal shall provide the Monitor with sufficient information about all meetings among the parties related to the Project, provided such meetings could impact the contractual relations between the Principal and the Contractor. The parties offer the Monitor the option to participate in such meetings.
- 6) As soon as the Monitor notices, or believes to notice, a violation of this agreement, they shall inform the Management of the Principal and request the Management to discontinue or take corrective action or other relevant action. The Monitor can, in this regard, submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action, or tolerate action.
- 7) The Monitor shall submit a written report to the Management of the Principal, within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.
- 8) If the Monitor has reported to the Management of the Principal a substantiated suspicion of offence under the relevant IPC / PC Act, and the Management of the Principal has not, with the reasonable time, taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.
- 9) The word '**Monitor**' would include both singular and plural.

Section 9 – Pact Duration

This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the contract, and for all other Bidders, 6 months after the contract has been awarded. Any violation of the same would entail disqualifying the bidders and exclusion from future business dealings. If any claim is made / lodged during this time, the same shall be binding and continue to be valid despite the lapse of this Pact as specified above, unless it is discharged / determined by the Management of the Principal.

Section 10 – Other provisions

- 1) This agreement is subject to Indian Law. The place of performance and jurisdiction is Registered Office of NIT Rourkela, Odisha - 769008.
- 2) Changes, supplements, and termination notices must be submitted in writing. Side agreements have not been made.
- 3) If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- 4) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties shall strive to come to an agreement according to their original intentions.
- 5) Issues like Warranty / Guarantee, etc., shall be outside the purview of IEMs.
- 6) In the event of any contradiction between the Integrity Pact and its Annex, the Clause in the Integrity Pact shall prevail.

IN WITNESS WHEREOF, the parties hereunto set their hands and seals and executed this INTEGRITY PACT as of the day/month/year first above written: For and on behalf of

The Director,
National Institute of Technology, Rourkela (First Party)
SIGNED, SEALED, AND DELIVERED by

Name:.....
Designation:.....
Address:.....
Authorized Signatory

For and on behalf of M/s.....(Second Party)
SIGNED, SEALED, AND DELIVERED by

Name:.....
Designation:.....
Address:.....
Representative/authorized signatory
Vide resolution dated..... passed by the Board of Directors
In the presence of Witness:
1.
2.