



**TENDER DOCUMENT FOR SUPPLY OF EQUIPMENTS TO
DEPARTMENT OF METALLURGICAL & MATERIALS
ENGINEERING**

At

**NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA,
Surathkal**

Supported by

**VISION GROUP ON SCIENCE AND TECHNOLOGY
Department of Information Technology, Biotechnology &
Science & Technology**

Government of Karnataka, Bengaluru- 560 070

**Ref. No.: VGST/GRD-639/2017-18/2018-19/404 dtd
18/12/2018**

Through

e-Procurement

Government of Karnataka

<https://eproc.karnataka.gov.in>

Project Titled:

**"Centre of Excellence for Development of Antimicrobial
Active Surfaces for Health care Applications"**

By

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SECTION-I

- **NOTICE INVITING TENDER (NIT):**

Programme Coordinator, National Institute of Technology Karnataka (NITK), Surathkal invites the tenders through e-procurement. Technical and Financial Bids from Equipment Manufacturers (EM) or Dealers for supply and installation of equipment with 3year comprehensive warranty for the VGST/GRD-639/2017-18/2018-19/404 sponsored project on "**Centre of Excellence for Development of Antimicrobial Active Surfaces for Health care Applications**" The list of equipment is at Annexure- III.

Tender documents shall be available from the e-procurement website:<https://eproc.karnataka.gov.in>. The tenders are submitted through e-procurement website only and hard copies are not accepted. For e-procurement helpline: 080-25501227/16.

- **ELIGIBILITY CRITERIA:**

- The bidder should be either Equipment Manufacturer (EM) or Dealer.
- The Bidder should not have been barred by any PSU/Govt. Department in doing business with them. (Please submit self-declaration).
- Interested and eligible Bidders are required to submit the Technical and Financial Bids through e-procurement.
- The Technical Bid should be accompanied by an EMD as specified in the Bid Document.
- The EMD shall be paid through e-procurement only as following modes: 1)Credit Card, 2) Debit Card, 3) Net Banking, 4) OTC (Over the counter ICICI Bank) &5) NEFT (National Electronic Fund Transfer)

- **TIME SCHEDULE:**

The summary of various activities with regard to this invitation of bids.

Sl No	Bid Reference	Date and Time
1.	Last date for submission of Bids	11/06/2019, 4.30 pm
2.	Opening of Bid	13/06/2019, 10.00 am
3.	Opening of Financial Bid	Intimated Later
4.	Place of opening of Bids	Board Room, National Institute of Technology Karnataka, Surathkal-575025 Karnataka, India Email: udayabhatk@gmail.com , kartick@nitk.edu.in Phone: (+91) 9480055475
5.	EMD	As per Annexure-III
6.	Designation and address of the procuring entity	Director, National Institute of Technology Karnataka, Surathkal, Srinivasnagar PO, Mangalore-575025, Karnataka State director@nitk.ac.in +91-824-2473000 Prof. Udaya Bhat K VGST Programme Co-coordinator, Metallurgical and Materials Engineering, National Institute of Technology Karnataka (NITK), Surathkal, P.O. Srinivasanagar 575025, Mangalore, D.K., Karnataka State Email: udayabhatk@gmail.com Phone: (+91) 9480055475

- **EXCLUSIVE RIGHT OF NITK, Surathkal:**

NITK, Surathkal does not bind itself to accept lowest or another tender/bid and reserves the right to cancel the bidding process and reject all bid sat any time prior to award of the contract without

assigning any reasons whatsoever and without thereby incurring any liability to the affected bidder on the grounds for the Purchaser's action. The Institute also reserves the right at the time of award of the contract to increase the quantity of the equipment and services specified in the schedule of requirements without any change in unit price of the ordered quantity. And not bound to accept the lowest rates.

Tender approval will be on the basis of quality and utility of the equipment.

SECTION-2

INSTRUCTIONS TO BIDDERS:

2.1 BIDDER TO BEAR COST OF PURCHASE OF TENDER:

The Bidder shall bear all costs associated with the preparation and submission of the bid. The Purchaser in any case will not be responsible or liable for these costs regardless of the conduct and outcome of the bidding process.

2.2 AMENDMENT TO BID DOCUMENTS:

1. At any time, prior to the date of submission of bids, the Purchaser may for any reason, whether at its own initiative or in response to a clarification by a prospective bidder, modify the bid documents by amendments.

2. The amendments/Corrigendum will be notified on the website and these amendments will be binding on them. Bidders are advised to visit the website regularly for updates on this Tender at <https://eproc.karnataka.gov.in>.

2.3 EXTENSION OF TIME:

In order to give prospective bidders required time in which to take the amendments into action in preparing their bid, the Purchaser may at its discretion extend the deadline for submission of bid suitably.

2.4 BID PRICE:

Price indicated in the schedule shall be F.O.R. destination at NITK, Surathkal basis. Prices should be inclusive of all taxes (Sales Tax/VAT and other taxes, transit insurance, freight (loading & unloading) and Service Tax etc) and include customs duty which shall be exempted upon custom duty exemption certificate. However rate of taxes and duties included in the price offer should also be given separately from the basic price. The prices quoted by the tendered shall remain firm during the entire period of the contract and shall not be subjected to variation on any account. The bid submitted with a variation clause (unless asked by the Purchaser) will be treated as non-responsive and rejected.

2.5 BIDDERS ELIGIBILITY AND QUALIFICATIONS:

Bidder shall furnish as a part of bid documents establishing the bidder's eligibility to supply the equipment. The bidder shall also submit documentary evidence in the form of literature, drawing, data on the equipment offered.

2.6 EARNEST MONEY DEPOSIT (EMD):

- The Bidders shall submit EMD amounting to Annexure III.
- The EMD shall be paid through e-procurement only as following modes:
a. Credit Card, b. Debit Card, c. Net Banking, d. OTC (Over the counter ICICI) & e. NEFT (National Electronic Fund Transfer).
- The bid not secured in accordance with the above shall be rejected by the Purchaser as, a non-responsive.
- The EMD of the unsuccessful bidder will be discharged/ returned as promptly as possible as but not later than 30 days after expiry of the bid validity period prescribed by the Purchaser.
- The successful bidder's EMD will be discharged upon the bidder's submission of the Performance Bank Guarantee.
- The EMD may be forfeited under the following circumstances:-
a. If a bidder withdraws his bid during the period of bid validity specified.
b. In case of a successful bidder, fails to submit the Performance Bank Guarantee.
c. If he fails to supply the equipment in terms of the conditions of contract.
- No interest is payable on EMD.
- In case of inadequacy or non-submission of prescribed EMD, the tender shall be deemed to be disqualified and shall be summarily rejected in the technical evaluation

2.7 VALIDITY PERIOD OF BID:

Bid shall remain valid for 90 days after the date of bid opening. The bid valid for a shorter period shall be rejected by the Purchaser as non-responsive. In exceptional circumstances, the purchaser may request the consent of the tenderer for an extension to the period of bid validity. The EMD provided under clause 2.6 (1) shall also be suitably extended. A bidder accepting the request and granting extension will not be permitted to modify his bid.

2.8 FORMAT OF SIGNING OF THE BID:

- The bidder shall prepare two copies of the bid clearly marking one copy as "Original Copy" and the other as "Duplicate Copy" & also provide softcopy of technical bid on CD-ROM in MS-Word format.
- In the event of any discrepancy between them, original copy shall prevail.
- The original copy of the bid shall be typed and shall be signed by the bidder or a person duly authorized by the bidder. The Letter of Authorization shall be accompanied by a written Power of Attorney accompanying the bid.
- All pages of the original bid except printed literature shall be initialled by the person signing the bid.
- The bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the bidder in which case such corrections shall be initialled by the bidder signing the bid.

2.9 DEADLINE FOR SUBMISSION OF BID:

Bid must be received by the Purchaser at the address specified and not later than the date and time specified in the NIT.

2.10 LATE BID:

Any bid received late by the Purchaser after the deadline for submission of the bid shall be rejected and returned un-opened to the bidder.

2.11 MODIFICATION AND WITHDRAWAL OF BIDS:

- The bidder may modify or withdraw his bid provided that written notice of modification or withdrawal is received by the Purchaser prior to the deadline prescribed for submission of bids.
- No bidder may modify or be allowed to withdraw bid subsequent to the deadline for submission of bids.

2.12 SUBMISSION OF BID:

Bids are to be submitted in bid form through e-procurement only: Offers received through Fax/E-mail or through open letter shall be ignored.

2.13 EVALUATION OF BIDS:

- Tenders will be evaluated based on Technical and Financial Bid.
- Technical bid tenders will be evaluated on the following basis:

a) Equipment Manufacturer/ Dealer

b) EMD

c) Substantive Responsiveness of the Bid i.e. a substantially nonresponsive bid shall be rejected by the Purchaser.

d) Attested copy of supply order/completion certificate of similar supplies during the last two years.

e) Self Declaration certificate that the bidder is not barred by any PSU/Govt. Department

- The Purchaser may waive any minor infirmity or non-conformity or irregularity in the bid which does not constitute an equipment deviation.

2.14 PURCHASER'S RIGHT TO VARY QUANTITIES:

The Purchaser reserves the right at the time of award of the contract to increase the quantity of the equipment and services specified in the schedule of requirements without any change in unit price of the ordered quantity.

2.15 PURCHASER'S RIGHT TO ACCEPT OR REJECT ANY OR ALL BID

The Purchaser does not bind himself to accept lowest or any other tender/bid and has the right to cancel the bidding process and reject all bids at any time prior to award of the contract without assigning any reasons whatsoever and without thereby incurring any Liability to the affected bidder on the grounds for the Purchaser's action.

- NOTIFICATION OF SUCCESSFUL BIDDER:
 - Prior to the expiration of the bid period, the Purchaser will notify the successful bidder in writing by registered letter or fax or e-mail, to be confirmed in writing by registered letter that its bid has been accepted.
 - The notification of the award will constitute the formation of the contract.
 - The successful bidder will furnish the Performance Guarantee within 15 days of the notification.
 - Upon successful bidder furnishing the Performance guarantee, the Purchaser will notify each unsuccessful bidder and will discharge its bid bond.

- **SIGNING OF CONTRACT:**

At the time as the Purchaser notifies the successful bidder that its bid has been accepted, the Purchaser will send the Bidder the contract form provided in the bidding documents, incorporating all agreement between the parties. Within 7 (seven) days of receipt of the contract form, the successful bidder shall sign and date the contract and return it to the Bidder.

- **CANCELLATION OF LETTER OF INTENT:**

Failure of the successful bidder to comply with the requirement of submission of Performance Guarantee in time shall constitute sufficient ground for the cancellation of the acceptance of bid and forfeiture of the bid bond, in which case Purchaser may make the offer to any other bidder at the discretion of the Purchaser or call for new bids.

- **DELIVERY:**

Delivery of the equipment shall be made by the supplier in accordance with the terms specified by the Purchaser in the Special conditions of the contract and equipment shall remain at the risk of the supplier until delivery have been completed in full. The Schedule of delivery shall be the essence of the contract.

SECTION - 3

3.0 GENERAL CONDITIONS OF THE CONTRACT

3.1 PRICE APPLICABILITY:

Prices quoted by the bidder in the Price Bid Schedule (Annexure VI) shall remain valid for a period of 1 (one) year from the date of signing the contract between the Purchaser and the Supplier.

3.2 STANDARDS:

The equipment supplied under the contract shall conform to the standards mentioned in the Technical Specifications (Annexure IV).

3.3 PATENT RIGHTS:

The Supplier shall indemnify the Purchaser against all third party actions/claims of infringement of patent, trademark or industrial design rights arising from the use of equipment or any part thereof.

• PERFORMANCE BANK GUARANTEE:

- Within 15 days of the Supplier's receipt of Letter of Intent (LOI)/Purchase Order, the Supplier shall furnish a Performance Bank Guarantee amounting to 10% of the contract/Purchase Order value issued by a Nationalized Bank in the prescribed format given in this tender(Annexure-I).
- The proceeds of the Performance Bank Guarantee shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the contract.
- The Performance Bond will be discharged by the Purchaser after completion of the Supplier's obligations including any warranty obligations under the contract.
- As regards validity of Performance Bank Guarantee, please refer to Special Conditions of the contract (Section-4).

• INSPECTION AND TESTS:

- The Purchaser or its representatives shall have the right to inspect and test the equipment for their conformity to the specifications. The Purchaser may also appoint an agency for this purpose. Where the Purchaser decides to conduct such tests on the premises of the Supplier, all reasonable facilities and assistance like testing instruments and other test gadgets including access to the drawings and production data shall be furnished to the Inspector free of costs. In case the tested equipment fail to conform to the specifications, the Inspector may reject

them and the Supplier shall either replace the rejected equipment or make alteration necessary to meet the specifications requirements free of cost to the Purchaser.

- Notwithstanding the pre-supply tests and inspections, the equipment on receipt in the Purchaser's premises shall also be tested and if any equipment or part thereof is found defective, the same shall be replaced free of cost to the Purchaser.
- If any equipment before it is taken over is found defective or fails to fulfil the requirements of the contract, the Purchaser shall give the Supplier notice setting forth details of such defects or failures and the Supplier shall make the equipment good or alter the same to make it comply with the requirements of the contract and in any case within a period not exceeding 2 months of the initial report. These replacements shall be made by the Supplier, free of the all charges, at the site(s).
- As regards Inspecting Authority and other details please refer to Special Condition of The Contract (Section-4).

3.6 TRAINING:

If the purchaser decides that prior training is necessary to operate particular equipment(s), the bidder shall provide such necessary onsite training free of cost to the personnel indicated by the purchaser for that equipment (s). The Bidder shall also provide all training equipment's, documents and aids.

• WARRANTY:

- The Supplier shall give warranty that equipment to be supplied shall be new and free from all defects and faults in equipment, workmanship, and manufacture and shall be of the highest grade and consistent with the established and generally accepted standards for equipments of the type ordered and shall perform in full conformity with the specifications and drawings. The Supplier shall be responsible for any defects that may develop under the conditions provided by the supplier and under proper use, arising from faulty equipments, design or workmanship such as corrosion of the equipment, inadequate contact protection, deficiencies in circuit design and or otherwise and shall remedy such defects at his own cost when called upon to do so by the Purchaser who shall state in writing in what respect equipment are faulty. This warrantee shall survive inspection or payment for, and acceptance of equipment after the equipment has been taken over.
- However if there is a warranty period specified in the Special Conditions of Contract (Section - 4) the same shall rule.

- If it becomes necessary for the supplier to replace or renew any defective portion/portions of the equipment under this clause, the provisions of the clause shall apply to the portion/portions of equipment's replaced or renewed or until the end of the warranty period. If any defect is not remedied within a reasonable time, the Purchaser may proceed to get the work done at the Supplier's risk and expenses, but without prejudice to any other rights which the Purchaser may have against the Supplier in respect of such defects.
- Replacement under warranty clause shall be made by the Supplier free of all charges at site including freight, insurance and other incidental charges.
- **CHANGE OF ORDERS:**
The Purchaser may at any time by written order given to the Supplier make changes Within the general scope of the contract in any one or more of the following:-
 - Drawings, designs or specifications where equipment to be furnished under the contract are to be specifically manufactured for the Purchaser.
 - Method of transportation or packing.
 - Place of delivery.
 - Services to be provided by the supplier.

If any such change causes an increase or decrease in the cost or the time required for the execution of the contract, an equitable adjustment shall be made in the contract price or delivery schedule or both and the contract shall accordingly be amended.

3.9 LIQUIDATED DAMAGES

- The date of the delivery of the equipment/services stipulated in the acceptance of tender should be deemed to be the essence of the contract and the delivery must be completed not later than the dates specified therein. Extension in delivery period will not be given except in exceptional circumstances. Should, however, deliveries be made after expiry of the contract delivery period and accepted by the consignee, such deliveries will not deprive the Purchaser of the right to recover Liquidated Damages.
- In case the Supplier fails to supply the equipment/services against the order, the same shall be procured from other suppliers at the cost and risk of the Supplier and the excess money will be recovered from any dues of the party.

- For late deliveries, as liquidated damages, a sum equal to 2% of the price of any equipment/services not delivered or total order value in case where part delivery is of no use to the Purchaser, for a week or part of a week subject to maximum limit of 10% of the total order will be recovered from the Supplier. The Purchaser also reserves the right to cancel the order in such cases and forfeit the Performance Bank Guarantee and may also debar the Supplier for future purchases.
4. Liquidated Damages can be recovered from any dues of the supplier.

3.10 ARBITRATION:

In the event of any dispute arising between NITK, Surathkal and the Supplier in any matter covered by this contract, the tribunals and courts in Mangalore will have the exclusive jurisdiction in respect of all matters and the provisions of the Indian Arbitration Conciliation Act, 1996 shall apply to such arbitration.

3.11 RISK PURCHASE:

In the event of Supplier's failure to execute the contract to the satisfaction of the Purchaser, the Purchaser reserves the right:

- To reject any part of the Contract executed and withhold payment for such portion of the contract till such time the defects are rectified to the satisfaction of the Purchaser.
- To terminate the Contract by giving two weeks notice in writing without assigning any reason & to get the Contract executed by other agency at the risk & cost of the supplier.

3.12 GENERAL LIEN:

Whenever under this contract any sum of money is recoverable from and payable by the Supplier, the Purchaser shall be entitled to recover such sum by appropriating in part or in whole the Performance Guarantee of the Supplier. In the event of the Performance Guarantee being insufficient, the balance or the total sum recoverable, as may be, shall be deducted from any sum due to the Supplier or which at any time thereafter may become due to the Supplier under this or any other contract with the Purchaser. Should this sum be not sufficient to cover the full amount recoverable, the Supplier shall pay to the Purchaser on demand the remaining balance due.

3.13 PACKING:

The supplier shall ensure that the Equipment/Equipments is securely and adequately packed to ensure safe arrival at the destination fully withstanding all hazards such as rough handling etc. during transit.

- **REPLACEMENT OF DEFECTIVE EQUIPMENT:**

- If any equipment or any part thereof, is found defective or fails to meet the requirements of the contract before, it is accepted, NITK, Surathkal shall give the Supplier a notice setting forth details of such defects or failures and the Supplier shall forthwith arrange to set right the defective equipment or replace the same by the good one to make it comply with the requirements of the contract. This in any case shall be completed within a period not exceeding one month from the date of the initial report pointing out the defects. The replacement or rectification shall be made at site by the Supplier free of cost. Should the Supplier fail to do the needful within this stipulated time frame, the purchaser reserves the right to reject the equipment in full or in part and get it replaced at the cost of the Supplier. The cost of any such replacement made by the Purchaser shall be deducted from the amount payable to the Supplier against this purchase order.
- If any equipment or part thereof is lost or rendered defective during transit, pending settlement of the insurance claim, fresh order shall be placed on the Supplier for such loss or defective equipment and the Supplier shall arrange to supply the same within three months of such order at the same prices and on the same general terms and conditions as mentioned in this purchase order.

3.15 FORCE MAJEURE:

If any time, during the continuance of this contract, the performance in whole or in part by either party under obligation as per this contract is prevented or delayed by reasons of any war or hostility, act of the public enemy, civil commotion, sabotage, fire, flood, explosion, epidemic, quarantine restrictions, strike, lockout or acts of God (hereinafter referred to as "eventuality"), provided notice of happening of any such eventuality is given by either party to the other within 21 days of the date of occurrence thereof, neither party shall by reason of such an "eventuality" be entitled to terminate this contract nor shall either party have any claim for damages against the other in respect of such non-performance or delay in performance and deliveries under the contract. The contract shall be resumed as soon as practicable after such "eventuality" has come to an end or ceased to exist. In case of any dispute, the decision of NITK, Surathkal shall be final and conclusive, provided further that if the performance in whole or part of any obligation under this contract is prevented or delayed by reason of any

such eventuality for a period exceeding 60 days, either party may at its option, terminate the contract. Provided also that if the contract is terminated under this clause the Purchaser shall be at liberty to take over from the Supplier at a price to be fixed by the Purchaser, which shall be final, all unused, undamaged and acceptable equipments, bought out components and other stores in the course of manufacture which may be in the possession of the Supplier at the time of such termination, or such portion thereof as the Purchaser may deem fit except such equipment, as the Supplier may, with the concurrence of the Purchaser, elect to retain.

3.16 TERMINATION FOR DEFAULT

The Purchaser, may, without prejudice to any other remedy for breach of contract, by written notice of default, sent to the Supplier, terminate this contract in whole or in part:

- a. If the supplier fails to deliver any or all the equipment within the time period (s) Specified in the contract, or any extension thereof granted by the Purchaser.
- b. If the Supplier fails to perform any other obligation(s) under the contract; and
- c. If the Supplier, in either of the above circumstances, does not remedy his failure within a period of 15 days (or such longer period as the Purchaser may authorize in writing) after receipt of the default notice from the Purchaser.
- d. On a notice period of 30 days.

In the event the Purchaser terminates the contract in whole or in part pursuant to above Para the Purchaser may procure, upon such terms and in such manner as it deems appropriate, equipment similar to those undelivered and the Supplier shall be liable to the Purchaser for any excess cost for such similar equipment. However, the Supplier shall continue the performance of the contract to the extent not terminated.

3.17 TERMINATION FOR INSOLVENCY:

The Purchaser may at any time terminate the Contract by giving written notice to the Supplier, without compensation to the supplier if the supplier becomes bankrupt or otherwise insolvent as declared by the competent court provided that such termination will not prejudice or effect any right of action or remedy which has accrued or will accrue thereafter to the purchaser.

3.18 ADD ON/ REPEAT ORDER:

NITK, Surathkal reserves the right to place add on/ Repeat order for additional quantity up to 100% of the original quantity at the same rate and terms & conditions of the purchase order within one year from the date of issue of purchase order.

SECTION - 4

4.0 SPECIAL CONDITIONS OF CONTRACT:

The following special conditions of the contract shall supplement the general conditions of the contract. Whenever there is a conflict, the provision herein shall prevail over those in the general condition of the contract.

4.1 PRICE BASIS

F.O.R. Destination NITK, Surathkal (Karnataka) bases.

4.2 PAYMENT TERMS

Payment will be released by NITK, Surathkal in Indian Rupees as follows:

- 90% payment within 90 days from the date of supply and installation at the F.O.R Destination.
- 10% within 90 days of successful installation and commissioning at each F.O.R
 - Destination subject to certificate from the inspecting agency that equipment has been
 - Successfully installed and commissioned, and working satisfactorily.
- No payment will be made for equipment rejected on testing.

4.3 PAYING AUTHORITY:

NITK, Surathkal.

4.4 CONSIGNEE:

NITK, Surathkal

4.5 INSPECTION AUTHORITY:

Inspection Authority will be nominated at the time of issue of Purchase Order.

4.6 DELIVERY SCHEDULE:

Within 4 weeks from the date of issue of purchase order.

4.7 LIQUIDATED DAMAGES (LD):

Shall be applicable @ 2% per week subject to a maximum of 10% of the Purchase Order.

4.8 PERFORMANCE BANK GUARANTEE (PBG):

The bidder is required to submit PBG for an amount equivalent to 10% of the Purchase Order value valid up to end of Warranty Period.

4.9 WARRANTY:

Comprehensive onsite warranty for 3(three) Year for all equipment. Services and Spares under warranty will be provided free of cost at sites. After expiry of the warranty period the supplier shall enter into an Annual Maintenance Contract (AMC) with the purchaser which such AMC is required by the purchaser.

4.10 SERVICE LEVEL AGREEMENT (SLA)

No Equipment should be down for more than 3 Calendar days in a month. Otherwise, penalty of Rs100/- per day per equipment is liable to be imposed upon the Supplier. The successful bidder shall be required to sign the Service Level Agreement (Annexure-II) with the purchaser based on the operation requirements.

4.11 ADVANCE PAYMENT

Normally, no advance payment shall be made. However, if in any exceptional case NITK, Surathkal, agrees to a Bidder's request for advance payment, such payment shall only be made against equivalent Bank Guarantee to be provided by the Bidder, as per norms of the Finance Department, Govt. of Karnataka.

FORMAT OF PERFORMANCE BANK GUARANTEE (PBG)

To,

Director, National Institute of Technology Karnataka, Surathkal
Srinivasnagar PO, Mangalore-575025, Karnataka State

OUR LETTER OF GUARANTEE No: _____

In consideration of "National Institute of Technology Karnataka, Surathkal, Karnataka, India" and having entered into an agreement dated----- / issued Purchase Order No.--- --dated--- with/on M/S----- (hereinafter referred to as "The Supplier");

Whereas the Supplier having unequivocally accepted to supply the equipment as per terms and conditions given in the Agreement dated----/ Purchase Order No. ---dated--- and NITK, Surathkal having agreed that the Supplier shall furnish to NITK, Surathkal Performance Bank Guarantee for the faithful performance of the entire contract, to the extent of 10% (ten percent) of the value of the Purchase Order i.e. for Rs.-----

We, ("The Bank") which shall include OUR successors, administrators and executors herewith establish an irrevocable Letter of Guarantee No. ----- Dated---- in your favor on account of----- (The Supplier) in cover of performance guarantee in accordance with the terms and conditions of the Agreement/Purchase Order.

Hereby, we undertake to pay up to but not exceeding Rs.----- (say-----only) upon receipt by us of your first written demand accompanied by your declaration stating that the amount claimed is due by reason of the Supplier having failed to perform the Agreement and despite any contestation on the part of above named supplier.

This Letter of Guarantee will expire on----- (after the completion of the warranty period) including 30 days of claim period and any claims made hereunder must be received by us on or before expiry date after which date this Letter of Guarantee will become of no effect whatsoever whether returned to us or not.

Authorized Signature
Manager
Seal of Bank

FORMAT FOR SERVICE LEVEL AGREEMENT

Terms of the Service Level Agreement would be as under:

- All the supplied equipment should be under THREE YEAR on site comprehensive warranty including replacement of defective spare parts.
- Bidder guarantees an uptime of 95% for the entire system failing which a penalty of Rs. 100/- (Rs. One hundred) per day per equipment will be recovered from the Bank Guarantee or the Payment due to the Vendor.
- The response time for maintenance call of equipment should not exceed 24 hours. The Service down time should not exceed 48 hours from the time at which the complaint was made. If the down time is more than the stipulated period, the Supplier will provide a stand by Service. In case the Service is not provided or an alternative Service not arranged within the stipulated period from the time of failure report then the Purchaser may choose to get the same Serviced from any other agency and the cost and expenditure incurred therein shall be recoverable from the Supplier.
- In case the equipment is not made operational within 21 days (three weeks) from the lodging of the complaint, Bank Guarantee provided by the bidder to NITK, Surathkal shall be invoked in respect of equipment during warranty period.
- All other suitable terms & conditions from the above tender would be made part of this.

The Downtime of the equipment starts from the time NITK, Surathkal complaint is logged in at the bidder address as provided by the bidder for entertaining complaints. Any delay in this shall be excluded from the availability calculations. The complaint can be logged during working days/hours.

Annexure -III

List of Equipment with quantity required and EMD

Sl. No	Name of Equipment/Items	Quantity	EMD
1	Computer controlled portable electro chemical station with EIS, including EC software	01	Rs. 27,800/-
2	Semi Microbalance	01	Rs. 2,500/-

TECHNICAL SPECIFICATIONS OF THE EQUIPMENT

Enclosed Separately in the E-Portal

1. **Computer controlled portable electrochemical system with EIS, including EC software**

Specification :

I) Compliance voltage: $\pm 14 V$ or more

Max applied voltage: $\pm 10V$ or more; current range: ± 100 pA to $\pm 4A$ or wide; current resolution : 800 fA or better, voltage resolution :1 μV or better; Frequency range: 10 μHz to 7 MHz or wider; Electrode configurations: 2, 3, 4, & 5; Data acquisition rate: 10,00,000 numbers/second.

Required software modules: Battery testing, Fuel cell and super capacitor testing, voltammetry testing;

Corrosion softwares covering TAFEL, LPR and ZRA and others,

Pulse measurement software (Normal pulse, Square wave pulse, Reverse normal pulse, Differential normal pulse, Differential pulse voltammetry and Differential pulse amperometry)

Voltamperometric techniques (Open circuit voltage, cyclic voltammetry, cyclic voltammetry linear, linear sweep voltammetry, Chrono amperometry, chrono potentiometry, large amplitude sinusoidal voltammetry, AC voltammetry)

Impedance measurement software (Galvano electrochemical impedance spectroscopy, Potentio electrochemical impedance spectroscopy, Staircase galvano electrochemical impedance spectroscopy, Potentio electrochemical impedance spectroscopy, Staircase potentio electrochemical impedance spectroscopy)

Ohmic drop determination options (Manual IR compensation, IR compensation, Current interrupt, etc)

Manual current control and manual potential control options

Battery testing options (Battery capacity determination, Potentiodynamic cycling with galvanostatic acceleration, Galvanostatic cycling with potential limitation, Modulo bat, Coulombic efficiency determination, constant power, constant load, alternate pulse galvano cycling, etc)

Photovoltaic /fuel cell testing options (I-V characterization, constant load discharge, constant power, constant voltage and constant current modules)

Corrosion measurement options (Ecorr vs Time, Linear polarization resistance, Tafel plot, Cyclic polarization, critical pitting temperature, Depassivation potential, Electrochemical noise, Galvanic coupling, Multielectrode potentiodynamic pitting, Multielectrode potentiostatic pitting, zero resistance ammeter, zero voltage current, sinusoidal micro polarization -both constant amplitude and variable amplitude, Evans diagram, etc.)

Solar and photovoltaic software, equivalent circuit fitting software.

Math Analysis tools like linear interpolation, subtract files. Integral calculation, filter, Fourier transform, Linear fit, circular fit, Derivative estimation, min/max determination, 2 & 3 dimensional view of different data points.

Impedance spectroscopy tools like Z fit / Z sim, Impedance data fitting, Impedance modelling, Mott-Schottky, Kramers-Kroning, smoothing,

Corrosion analysis tools like Multipitting statistics, Tafel fit with minimization, Corr sim, Vasp fit

Electrochemistry tools like Peak analysis, wave analysis, CV sim, CV fit, Levich, Koutecky Levich, Process data (Cycles, R QCM Mass).

Fuel cell analysis tools like IR compensation, Photovoltaic analysis, etc.

Battery analysis tools like Capacity and energy per cycle, process data (cycles. R QCM Mass), summary per protocol and cycle, CED fit, DCS.

Electrochemical noise analysis methods like Standard deviation, power spectra density, maximum entropy method

Appropriate PC/laptop, data should be exportable (XY format), Ethernet communication accessories for remote access.

Peripherals: quote separately for one each of -Small volume electro chemical cell with platinum counter electrode, purge tube, Teflon cap, additional 5 vials. Glassy carbon working electrode, Platinum working electrode, Ag/AgCl reference electrode, Nonaqueous reference electrode

System should be Windows supported

3 years warranty period, AMC after 3rd year to be quoted.

Installation and training to be given.

Quote separately additional charges for landing at NITK

10% of PO value need to be given as performance security value at the time of LC generation.

2. Semi microbalance

Specification:

Microbalance capacity = 40-60 gm, Accuracy =0.01 mg,

High performance and stability, Automatic calibration, Adjustable response characteristics to help cope with the effect of drafts and vibrations.

Self correction for temperature changes, Density determination function.

Windows communication tools software on RS 232C interface. Pan size 3-4 inch,

Sufficient electrical cables, Installation at NITK to be provided, Cost at NITK to be quoted, Warranty : 3 years,

10% of PO need to be submitted at the time of LC generation as performance security.

Note to Bidder:

- Bidder should be a registered firm and provide the Company Registration Certificate.
- Bidder should provide the financial turnover for the last 3 years
- Bidder should provide the copies of technical literature with their client list.
- Bidder should submit OEM/Dealer certificate.
- Bidder should have the experience in handling the Government projects like VGST Projects (submit order copies)

E-Tendering Guidelines to Vendors:

- Vendors should have registered in e-Procurement Portal Government of Karnataka
 - The tender forms are available on the website <https://eproc.karnataka.gov.in>
 - Tenders should be submitted only through e-Procurement Portal Government of Karnataka
 - Tender will not be accepted after the date and time fixed for receipt of tenders as set in Tender notice or subsequent extensions if any.
 - Tenderer has to make the EMD / Tender Processing Fee payment through e-Procurement portal
6. Relevant documents in proof have to be uploaded wherever required.

Following data sheets to be filled and provided by individual suppliers

Annexure-V

DATASHEET

Sl No	Equipment/ Items	Make	Model No	Specification	Quantity
1.					

Format for Contract Agreement
AGREEMENT

This Agreement, made the ____ day of __ 2019, by and between NITK, Surathkal. (Name and address of Purchaser hereinafter called "the Purchaser") and----- (name and address of Supplier hereinafter called "the Supplier") of the other part.

Whereas the Purchaser is desirous that the Supplier execute ----- identification number of Contract hereinafter called "the Contract") and the Purchaser has accepted the Bid/Quotation submitted by the Supplier for the execution and completion of such Contract.

Now this Agreement witnesses as follows:

- In this Agreement, words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereafter referred to, and they shall be deemed to form and be read and construed as part of this Agreement.
- In consideration of the payments to be made by the Purchaser to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Purchaser to execute and complete the Contract in conformity in all respects with the provisions of the Contract.
- The Purchaser hereby covenants to pay the Supplier in consideration of the execution and completion of the Contract the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
- The General Conditions and Special Conditions of the contract document (enclosed) as contained in the Tender Document No. ----- Of NITK, Surathkal. A constitute part of this contract agreement and terms and conditions contained therein will be binding on the Purchaser and the Supplier.

In Witness whereof the parties hereto have caused this Agreement to be executed on

Signed By _____ (the Purchaser)

Signed By _____ (the Supplier)