



**STIC**

**Sophisticated Test and Instrumentation Centre**

*(A Joint Venture of KSCSTE, Govt. of Kerala and Cochin University of Science and Technology)*

Cochin University Campus, Kochi - 682 022, Kerala, India

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Ref. No. STIC/


**THE DIRECTOR**

**NOTICE INVITING TENDER**

Sealed Competitive quotations are invited from eligible bidders/suppliers for supplying the following item(s) which are proposed to be procured by STIC.

1. *Floor Model **X-Ray Diffractometer** with accessories*
2. ***ICP-MS** with autosampler and accessories*
3. ***Microwave digester** and accessories*
4. ***Ion Chromatograph** and accessories*

The details are available in our website [www.sticindia.com](http://www.sticindia.com)

  
- DIRECTOR, STIC. 05/06/18

**Tender Document**  
**for Competitive Bidding for the Supply, Installation and**  
**Demonstration of Following Stores/Goods/Equipment**

<b>Item No.</b>	<b>Tender Reference No</b>	<b>Brief Description of Stores/Goods/Equipment</b>
01	STIC/SAIF/XRD/2018-19/525	Floor Model X-ray Diffractometer with accessories
02	STIC/SAIF/ICPMS/2018-19/526	(i) ICP-MS with auto sampler and accessories (ii) Micro wave digester and accessories (iii) Ion Chromatograph and accessories

**TENDER DOCUMENT**



**Sophisticated Test and Instrumentation Centre (STIC),  
Kochi University P.O,  
Kochi,  
Kerala, India 682022**

**05<sup>th</sup> June 2018**

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## **SECTION-I: DEFINITIONS**

In this document, the following terms shall be interpreted as indicated:

1. STIC means Sophisticated Test and Instrumentation Centre, Cochin University P.O Kochi (Cochin -Kochi – Ernakulam District )
2. "The Tenderer or the Bidder" means the individual or firm submitting a tender or bid for purchase of the Goods and Services by STIC against a tender notice.
3. "The Purchaser(s) or Client(s)" means the organization purchasing the Goods / services (i.e., STIC)
4. "The Supplier" or "The Vendor" means the individual or firm supplying the Goods and Services under this Contract.
5. "The Contract" means the agreement entered into between the Purchaser and the Supplier, as recorded in the Contract Form Signed by the parties, including all the attachments and appendices thereto and all documents incorporated by reference therein;
6. "The Contract Price" means the price payable to the Supplier under the Contract for the full and proper performance of its contractual obligations;
7. "The Goods" means all the hardware / equipment, machinery and /or other materials which the Supplier is required to supply to the Purchaser under the Contract;
8. "Services" means services ancillary to the supply of the Goods, such as transportation and insurance and any other incidental services, such as installation, commissioning, provision of technical assistance, training and other obligations of the Supplier covered under the Contract;
9. "GTC" means the General Terms and Conditions of Contract contained in this section.
10. "STC" means the Special Terms and Conditions of Contract.
11. "The Client's Country" is the country named in STC.
12. "Day" means a working day.

## SECTION-II: INVITATION FOR BIDS & INSTRUCTION TO BIDDERS (IBIB)

1. STIC, Cochin University P.O Kochi, Kerala India invites sealed tenders from eligible Indian/Foreign Original Equipment Manufacturers or their authorized distributors, dealers or Indian Agent for supply, installation and commissioning of stores/goods/equipments listed in Section V of this document.
2. Interested eligible Bidders may download the Tender Document from our website <http://sticindia.com>, and shall deposit the tender document fee as indicated against the equipment in Indian rupees per tender by demand draft in favour of “The Director STIC” payable at Ernakulam, Kerala, India. The tender fee shall be deposited in a cover, indicating over the cover that the tender fee and put in the technical bid cover. Payable at Ernakulam, Kerala, India.

Item no.	Tender Reference No	Brief Description of Stores/Goods/ Equipment	Tender Fee (in Rupees) GST Included
01	STIC/SAIF/XRD/ 2018-19/525	Floor Model X-ray Diffractometer with accessories	Rs. 2360/-
02	STIC/SAIF/ICPMS/ 2018-19/526	(i)ICP-MS with auto sampler and accessories (ii) Micro wave digester and accessories (iii) Ion Chromatograph and accessories (above 3 items should be quoted individually)	Rs 2360/-

3. A bidder may bid for any one or more of the items/stores/goods/equipments mentioned in Section V. A separate bid needs to be submitted for each item/store/goods/equipment as per norms given below.
4. Two bid system will be adopted for this tender;

In this system, tenderer must submit their offer in two separate sealed envelopes as mentioned below:

Envelope No. 1: Called "Technical Bid " shall contain (to be submitted in duplicate):

- a. Earnest Money Deposit (EMD) as given in IBIB Clause 12 or necessary exemption certificate if bidder is registered with DGS&D or NSIC.
- b. Form of Details about Tenderer (Sec VII) along with the following documents.
  1. A certified photocopy of Partnership deed / memorandum of articles and associations.
  2. Power of attorney, if required
  3. Certified copy of valid latest Income Tax clearance certificate
  4. Details of service centers, international offices, point of presence, including registration details, if any.
  5. List of service stations / Customer support stations in India, with detailed address and phone numbers and contact person through whom services will be provided (if required)
  6. Documents of previous Experience of Bidder's Eligibility, Purchase order & Completion certificate of end users.
  7. Detailed information regarding previous experience of supply and installation of the similar equipment/systems to any Government Organization and list of the clients
  8. A copy of the Agency agreement of Indian agent with the Foreign Supplier, if applicable.
  9. A copy of registration with DGS&D for Indian agent of Foreign Supplier, if applicable.
- c. Technical Compliance for all Clauses in Technical Specifications as given in Section V.
- d. Confirmation letter that the financial bid covers all the items of the tender document.
- e. Guarantee Bond for Performance Security Deposit as given in Section VIII.
- f. Manufacturer's Authorization Form as given in Section IX.
- g. Any other related documents.
- h. Tender Fee as mentioned in the clause 2.
- i. All Documents in the Technical Bid should be submitted in the above sequence with Index Page and Page numbers.

Envelope No. 2 : Called "Commercial Bid " shall contain:

1. Duly filled prescribed Bid Form and Price Schedule (Section VI) with proper seal and signature of authorized person on each paper of tender
2. Item-wise unit cost as well as total cost for total requirement should be quoted in clean and neat manner in figure as well as words
3. Price bid should contain price details as per Section VI.

Both the technical and commercial envelopes should be sealed separately and clearly indicate **"Envelope no. 1 - Technical Bid"** and **"Envelope no. 2 - Commercial Bid"**. Both the sealed envelopes should be kept in a third larger envelope and addressed to the:

**The Director  
Sophisticated Test and Instrumentation Centre,  
Cochin University P.O  
Kochi Ernakulam District Kerala 682022  
Tel: + 91 - 484 - 2575908, 2576697, 2576698**

**Please write the tender reference number on each envelope and seal all the envelopes as per IBIB Clause 15.**

If it is found that the Tenderer does not submit any of the above documents or if it is found that the price quoted is submitted with technical bid, the tender will be rejected.

#### **IMPORTANT DATES FOR SUBMISSION OF TENDER**

Item no.	Tender Reference No	Brief Description of Stores/Goods/ Equipment	EMD (in Rupees)	Place of Delivery
01	STIC/SAIF/XRD/2018-19/525	Floor Model X-ray Diffractometer with accessories	Rs. 2,60,000	STIC Kochi
02	STIC/SAIF/ICPMS/2018-19/526	(i)ICP-MS with auto sampler and accessories (ii) Micro wave digester and accessories (iii) Ion Chromatograph and accessories (above 3 items should be quoted individually)	Rs. 2,60,000	STIC Kochi

- Date of Pre bid conference** : **Wednesday 13<sup>th</sup> June 2018,**  
**at 10 am -12 (PXRD)**  
**2 – 4 pm (ICP MS)**
- Last Date for Receipt of Tender** : **29<sup>th</sup> June, 2018 (Upto 15.00 hrs)**
- Date of Opening of Technical Bids of Tender** : **29<sup>th</sup> June, 2018 (at 15.30 hrs)**

The envelope no. 1 containing Technical Bid will be opened at **15.30 hrs on Friday 29<sup>th</sup> June, 2018 at STIC, Kochi** in the presence of the nominated committee of STIC Kochi and in the presence of the participant bidders or their authorized representatives. Any change in this will be duly communicated to the bidders.

### **5. Eligible Bidders**

- 5.1 This invitation for Bids is open to Indian/Foreign Original Equipment Manufacturing companies or their authorized distributors/dealers or Indian Agents who are to supply the equipment and provide warranty on behalf of respective original equipment manufacturers and who have their sales and support office(s) in India. The tender shall be submitted by either the Indian Agent on behalf of the Principal/OEM or by Principal/OEM itself, but both cannot bid simultaneously for the same product in the same tender. If an agent submits bid on behalf of the Principal/OEM, the same agent shall not submit a bid on behalf of another principal/OEM in the same tender for the same item/product
- 5.2 The Indian/Foreign Original Equipment Manufacturing companies (or their authorized distributors/dealers/Indian Agents) should have been in the business of supply of the stores/goods/equipments successively for the last three years.
- 5.3 The bidder should be preferably ISO-9000 Certified.
- The bidder is required to submit the documentary evidence (Purchase order & Completion Certificate) for the above along with the Technical Bid.**
- 5.4 Bidders should not be under a declaration of ineligibility for corrupt and fraudulent practices issued by STIC in accordance with IBIB Clause 27.

### **6. Eligible Goods and Services**

- 6.1 All goods and ancillary services/spares to be provided under the Contract shall have their origin in eligible source Countries, and all expenditures made under the contract will be limited to such goods and services.



- 6.2 For purpose of this clause, “origin” means the place from where the goods are supplied, through manufacturing, processing or substantial or major assembling of components from or from which the ancillary services/spares are supplied. Goods are produced, when a commercially recognized product results that is substantially different in basic characteristics or in purpose or utility from its components.
- 6.3 The country of origin of goods and services is distinct from the nationality of the Bidder.

**7. Cost of Bidding**

- 7.1 The Bidder shall bear all the costs associated with the preparation and submission of its bid, and STIC will in no case be responsible or liable for these costs, regardless of conduct or outcome of bidding process.
- 7.2 The Bidder is expected to examine all instructions, forms, terms and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or submission of a bid not substantially responsive to the bidding documents in every respect will be at the Bidder’s risk and may result in rejection of its bid.

**8. Clarification of Bidding Documents**

A prospective Bidder requiring any clarification of the bidding documents may notify

**The Director  
Sophisticated Test and Instrumentation Centre,  
Cochin University P.O  
Kochi Ernakulam District Kerala 682022  
Tel: + 91 - 484 - 2575908, 2576697, 2576698(O)  
Fax: + 91 - 484 - 2576699.**

**GST Number: GSTIN 32AALFS5518G1Z7.**

in writing at the address indicated above. STIC will respond in writing to any request for the clarification of any bidding documents which it receives 10 days prior to deadline for submission of bids.

***B. PREPARATION OF BIDS***

**9. Language of Bid**

The bid prepared by the Bidder, as well as all correspondence and documents relating to the bid exchanged by the Bidder and STIC shall be in English language. Supporting documents and printed literature furnished by the Bidder may be in another language provided they are accompanied by an appropriate translation of

the relevant document in the English language and in such a case, for purpose of interpretation of the Bid, the English translation shall govern.

**10. Bid Form**

The Bidder shall complete the Bid Form (Section VI) and the appropriate Price Schedule furnished in the documents indicating the goods to be supplied and services to be offered, a brief description of the goods and services, their country of origin, quantity and price.

**11. Documents establishing Good's Eligibility and Conformity to Bidding Documents.**

11.1 The Bidder shall furnish, as part of its bid, documents establishing the eligibility and conformity to the bidding documents of all goods and services, which the Bidder proposes to supply under the contract.

11.2 The documentary evidence of the goods and services eligibility shall consist of a statement in the price schedule on the country of origin of goods and services offered with a certificate of origin shall confirm at the time of shipment.

11.3 The documentary evidence of conformity of goods and services to the bidding documents may be in the form of literature, drawing and data, and shall consist of:

- a) A detailed description of the essential technical and performance characteristics of the goods;
- b) A list giving full particulars, including available sources and current prices, of spare parts, special tools, etc., necessary for the proper and continuing functioning of the goods for the period for the five years following the commencement of the use of the goods by STIC, and
- c) An item-by-item commentary on STIC's Technical Specification demonstrating substantial responsiveness of the goods and services to those specifications or a statement of deviations and exceptions to the provisions of the Technical Specifications.
- d) Bidder should give complete details of all the configurations of the equipment offered along with Model and Modules of the product offered.
- e) Bidder should give Bill of material in technical bid without commercial details.

11.4 For purposes of the commentary, the Bidder shall note that standards for workmanship, material and equipment, and references to brand names or catalogue numbers designated by STIC in its Technical Specifications are intended to be descriptive only and not restrictive.

## 12. Earnest Money Deposit (EMD)

12.1 E.M.D or Bid Security for each item in Indian Rupees as per the Table under clause: 12.1.4 should be deposited by the Tenderer, in any one of the following forms, along with the Technical bid:-

- 12.1.1 Cash Deposit Receipt duly endorsed in favour of STIC or Pay Order or Demand Draft payable at Ernakulam in favour of The Director STIC
- 12.1.2 Bank Guarantee from a Nationalised Bank in favour of STIC - irrevocable and operative till the expiry of sixty days after the validity of offer.
- 12.1.3 Fixed Deposit Receipt issued by Nationalised banks endorsed in favour of STIC Kochi.
- 12.1.4 EMD in case of a Foreign Supplier should be furnished by its Indian agent in any of the forms of IBIB Clauses 12.1.1 to 12.1.3. In case the Foreign Supplier does not have an Indian agent, EMD may be paid either through Bank Guarantee issued by the foreign branches of Indian nationalized bank or Bank Draft in US\$ for equivalent amount in favour of STIC payable at Ernakulam as the case may be.

<b>Item no.</b>	<b>Tender Reference No</b>	<b>Brief Description of Stores/Goods/ Equipment</b>	<b>EMD (in Rupees)</b>
01	STIC/SAIF/XRD/ 2018-19/525	Floor Model X-ray Diffractometer with accessories	Rs. 2,60,000/-
02	STIC/SAIF/ICPMS/ 2018-19/526	(i) ICP-MS with auto sampler and accessories (ii) Micro wave digester and accessories (iii) Ion Chromatograph and accessories (above 3 items should be quoted individually)	Rs. 2,60,000/-

- 12.2 The EMD shall be put in a separate envelope superscribing tender reference no. as such on it and put in the envelope containing technical bid as described in IBIB Clause 4. In the absence of EMD the Bid will not be accepted.
- 12.3 The Earnest Money Deposit will be returned along with necessary endorsement for payment to the bidder (without interest) whose offers are not acceptable to STIC after placing the final order.
- 12.4 The EMD shall also be forfeited:
- 12.4.1 if a Bidder withdraws its bid or increases rates during the period of Bid validity specified by the Bidder on the Bid Form ;
- 12.4.2 or in case of a successful Bidder, if the Bidder fails:
- a) to accept the Purchase Order as per IBIB Clause 25 or refusal to execute the tender after it has been awarded or obligations under the same are not fulfilled; or
  - b) to furnish the performance security deposit in accordance with IBIB Clause 26.

### **13. Period of Validity Bids**

- 13.1 Bids shall be valid for 90 days after the date of bid opening prescribed by STIC KOCHI. A Bid valid for a shorter period shall be rejected by STIC as non-responsive.
- 13.2 In exceptional circumstances, STIC may solicit the Bidder's consent to extend the period of validity of the Bid. The request and the responses thereto shall be made in writing. The Bid Security period, shall also be suitably extended. A Bidder may refuse the request by forfeiting its EMD. A Bidder granting the request will not be permitted to modify its bid.
- 13.3 Bid evaluation will be based on the bid prices without taking into consideration the above corrections.

### **14. Format and Signing of Bid**

- 14.1 Both the Bids envelopes and their contents shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to bind the Bidder to the Contract. Written power-of-attorney accompanying the Bid shall support the latter authorization. The person or persons signing the Bid shall initial all pages of the Bid, except for unamended printed literature.
- 14.2 Any interlineations, corrections, erasures or overwriting shall be valid only if the person or persons signing the Bid sign them.

### ***C. SUBMISSION OF BIDS***

#### **15. Sealing and Marking of Bids**

15.1 The Bidders shall seal the two envelopes in separate inner envelopes, duly marking the envelopes as Technical Bid and Commercial Bid. Tender Reference No. and name and address of Bidder should be marked on each of Technical Bid Envelope and Commercial Bid Envelope. These two envelopes should be placed inside an outer envelope. The outer envelope shall be sealed and indicate Tender Reference No. and name and the name and address of the bidder.

15.2 The inner and outer envelopes shall be addressed to the

The Director  
STIC, Cochin University P.O  
Kochi – 682022, Kerala, India

15.3 The inner envelope shall also indicate the name and address of the Bidder to be returned unopened in case it is declared “late”.

15.4 If the outer envelope is not sealed and marked as specified, STIC will assume no responsibility for the Bidder’s misplacement or premature opening.

15.5 Telex, cable, e-mail or facsimile bids will be rejected.

#### **16. Deadline for Submission of Bids**

16.1 **Bids must be received by STIC at its address mentioned above not later than 29<sup>th</sup> June, 2018 at 15.00 hrs at STIC Kochi.** Bids may be sent through courier/speed post or inward Counter at STIC office. In the event of the specified date for the submission of Bids being declared as a holiday for STIC, the bids will be received upto the appointed time on the next working day.

16.2 STIC may, at its discretion, extend this deadline for submission of bids by amending the tender document, in which case all rights and obligations STIC and Bidders will thereafter be subject to the deadline as extended.

17. **Late Bids:** Any bid inadvertently received by STIC after the deadline for submission of bids prescribed by STIC, will not be considered and returned unopened to the Bidder.

## **D. BID OPENING AND EVALUATION OF BIDS**

### **18. Opening of Bids by STIC**

- 18.1 **A nominated Committee (Purchase Committee) of STIC will open all Technical Bids, in the presence of Bidder or his representative, who choose to attend, at 15.30 hrs on 29<sup>th</sup> June, 2018 at STIC Kochi.**
- 18.2 The Bidder's representative who is present shall sign an attendance register evidencing their attendance. In the event of the specified date of Bid opening being declared holiday for STIC, the Bid shall be opened at the appointed time and location on the next working day.
- 18.3 The Bidder's names, the presence or the absence of requisite EMD and such other details as STIC, at its discretion, may consider appropriate, will be announced at the time of opening. No Bid shall be rejected at the opening, except for late bids, which shall be returned unopened to the bidders.
- 18.4 After the rigorous evaluation of the Technical Bid by STIC, the qualified tenderers will be short-listed.
- 18.5 No clarification at the initiative of the bidder, after the technical bids are opened shall be entertained.
- 18.6 The Commercial Bids will be opened from the Short listed Bidders only at a time and place to be intimated to the Short listed Bidders. The bid prices, discounts and such other details as STIC KOCHI, at its discretion, may consider appropriate, will be announced at the time of opening of Commercial Bids.

### **19. Clarification of Bids**

During evaluation of bids, STIC KOCHI, at its discretion, may ask the Bidder for a clarification of its bid. The request for a clarification and the response shall be in writing and no change in prices or substance of the bid shall be sought, offered or permitted. However No post bid clarification at the initiative of the bidder; shall be entertained.

### **20. Preliminary Examination**

- 20.1 STIC KOCHI will examine the technical bids to determine whether they are complete, whether any computational errors have been made, whether sureties have been furnished, whether the documents have been properly signed, and whether the bids are generally in order. Bids from dealers, without proper authorization from the manufacturer as per **Section IX**, shall be treated as non-responsive.
- 20.2 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If the supplier does not accept the correction

of errors, its bid will be rejected. If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected. If there is a discrepancy between words and figures, the amount in words will prevail.

- 20.3 STIC KOCHI may waive any minor formality or non-conformity in a bid, which does not constitute a material deviation, provided such a waiver does not prejudice or affect the relative ranking of any Bidder. Prior to the detailed evaluation, STIC KOCHI will determine the substantial responsiveness of each bid to the bidding documents. For purposes of this Clause, a substantially responsive bid is one, which confirms to all the terms and conditions of the bidding documents without material deviation. Deviations from or objections or reservations to critical provisions such as those concerning EMD (IBIB Clause 12), Guarantee Bond for Performance Security Deposit (IBIB Clause 26), Warranty (GTC Clause 15), Applicable law (GTC Clause 22) and Taxes and duties (STC Clause 1.4 & 1.5) will be deemed to be material deviations. STIC KOCHI's determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.
- 20.4 If a Bid is not substantially responsive, it will be rejected by STIC KOCHI and may not subsequently be made responsive by the Bidder by correction of the non-conformity.

## **21. Evaluation and comparison of Bids**

- 21.1 STIC KOCHI will evaluate and compare the bids, which have been determined to be substantially responsive.
- 21.2 In STIC KOCHI's evaluation of a bid price, such price evaluation shall include all costs as well as duties and taxes paid or payable on components and raw material incorporated or to be incorporated in the goods, and excise duty on the finished goods, (if Payable) and price of incidental services, the following factors, in the manner and to the extent indicated in the Technical Specifications:
- 21.2.1 Cost of inland transportation, freight, transit insurance and other costs within India incidental to the delivery of the goods to their final destination;
  - 21.2.2 Delivery schedule offered in the bid;
  - 21.2.3 Deviations in payment schedule from that specified in the General Terms and Conditions of Contract;
  - 21.2.4 The availability in India of spare parts and after-sales services for the equipment offered in the bid;
  - 21.2.5 While evaluating the tender STIC KOCHI, has the exclusive right to include or exclude any or all the spare parts or accessories

mentioned in the tender for which the tenderer is required to quote separately

21.3 Delivery Schedule

STIC KOCHI requires that the goods under the Invitation for Bids shall be delivered at the time specified in the Technical Specifications. The estimated time of arrival of goods at the STIC KOCHI site should be calculated for each bid after allowing for reasonable transportation time. The supplier will have to pay a penalty to STIC KOCHI in the form and at the rate mentioned in the GTC Clause No.19. No credit will be given to earlier deliveries and Bids offering delivery beyond 04 to 06 weeks of stipulated delivery period will be treated as unresponsive.

21.4 Deviation in Payment Schedule.

The Special Terms and Conditions of Contract stipulate the payment schedule offered by STIC KOCHI. **(Clause 1.6 and clause 2.18)**

21.5 Spare parts and after sales services facilities in India

The cost to STIC KOCHI of establishing the minimum services facilities and parts inventories, as outlined elsewhere in bidding documents, if quoted separately, shall be added to the bid price.

## **22 Contacting STIC KOCHI**

22.1 Subject to IBIB Clause 19, no Bidder shall contact STIC KOCHI, on any matter relating to its bid, from the time of the bid opening to the time of contract is awarded. If he wishes to bring additional information to the notice of STIC KOCHI, it should do so in writing. STIC KOCHI reserves its right as to whether such additional information should be considered or otherwise.

22.2 Any effort by a Bidder to influence STIC KOCHI in its decision on bid evaluation, bid comparison or contract award shall result in disqualification of the Bidder's Bid and also forfeiture of his EMD amount.

## **23 Purchase's Right to Accept Any Bid and to Reject Any or All Bids**

STIC KOCHI reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of Contracts, without thereby incurring any liability to the affected Bidder or bidders or any obligation to inform the affected Bidder or Bidders of the grounds for STIC KOCHI's action.



## **24 Notification of Awards**

- 24.1 Prior to the expiration of the period of the bid validity, STIC KOCHI will notify the successful bidder in writing, to be confirmed in writing by registered letter, that his bid has been accepted unconditionally.
- 24.2 The notification of award will constitute the formation of the Contract at Bidder's cost.
- 24.3 Upon the successful Bidder's furnishing of Performance Security Deposit pursuant to IBIB Clause 26, STIC KOCHI will promptly notify each unsuccessful Bidder and will discharge its EMD or bid security; pursuant to IBIB Clause 12.

## **25 Signing of Contract**

- 25.1 At the same time as STIC KOCHI notifies the successful Bidder that its bid has been accepted, STIC KOCHI will send the bidder the Purchase Order, incorporating all the terms and conditions.
- 25.2 Within 10 days of receipt of the Purchase Order/Contract, the successful bidder shall sign and put the date in Purchase Order/contract and return it to STIC KOCHI along with Performance Security Deposit as per IBIB Clause 26.

## **26 Performance Security Deposit**

- 26.1 Within 10 days of the receipt of notification of award of purchase order / contract from STIC KOCHI, the Bidder shall furnish a Performance Security Deposit equivalent to 10% of the contract value in anyone of the forms as given below:
  - 26.1.2 Cash Deposit Receipt duly endorsed in favour of STIC KOCHI or Pay Order or Demand Draft payable at Ernakulam in favour of Director STIC KOCHI.
  - 26.1.3 Bank Guarantee from a Nationalised Bank in favour of STIC KOCHI - irrevocable and operative for the entire period starting from acceptance of the contract ending 60 days beyond the date of completion of all contractual obligations of supplier, including warranty obligation.
  - 26.1.4 Fixed Deposit Receipt issued by Nationalised banks endorsed in favour of STIC KOCHI,
- 26.2 The Performance Security Deposit is required towards fulfillment of the Purchase order / Contract obligations. This Security Deposit will be forfeited in case the successful Bidder fails to execute the Purchase order/ Contract.
- 26.3 Failure of the successful Bidder to comply with the requirement of the IBIB Clause 27 can constitute sufficient grounds for the annulment of the award in which event STIC KOCHI may call for new bids.

**27 Corrupt or Fraudulent Practices.**

- 27.1 STIC KOCHI requires that the bidders/suppliers/ contractors under this tender, observe the highest standards of ethics during the procurement and execution of such contracts. In pursuance of this policy, STIC KOCHI:
  - 27.1.2 Defines for the purposes of this provision, the terms set forth as follows:
    - 27.1.3 “corrupt practice” means the offering, giving, receiving or soliciting of anything of value to influence the action of the public official in the procurement process or in contract execution; and
    - 27.1.4 “fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or execution of a contract to the detriment of STIC, KOCHI, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive STIC, KOCHI of the benefits of the free and open competition;
    - 27.1.5 will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;
- 27.2 STIC KOCHI will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it at any time determines that the firm has engaged in corrupt and fraudulent practices in competing for, or in executing, a contract.

**28. Interpretation of the clauses in the Tender Document / Contract Document**

In case of any ambiguity in the interpretation of any of the clauses in Tender Document or the Contract Document, the interpretation of the Director, STIC, KOCHI shall be final and binding on all parties.

**29. In case of any legal dispute the jurisdiction will be Ernakulam only.**

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**SECTION III: SPECIAL TERMS AND CONDITIONS (STC)**

### **SECTION III: SPECIAL TERMS AND CONDITIONS (STC)**

#### **1. FOR INDIAN SUPPLIERS:**

1.1 In case of partnership firm or Joint Hindu concern, the names and full particulars of the partners or the members if the Joint Hindu family owning the concern, the information will have to be submitted on separate sheet along with the Tender. The Tender must be signed:-

- (i) In the event of being a sole proprietary concern by the sole proprietor or by a constituted attorney duly authorized to enter into and sign agreements on his behalf including agreement to refute disputes arising under or relating to such agreement to arbitration by a power of attorney signed by the proprietor and authenticated by a Notary Public or Magistrate.
- (ii) In the event of being a partnership firm, by all partners or by a constituted attorney duly authorized to enter into and sign on behalf of the partnership firm including agreements, to refute disputes arising under or relating to such agreements or arbitration by a power of attorney executed under the firm's common seal and authenticated by a Notary Public or a Magistrate.
- (iii) In the event of being a Hindu Joint Family concern, by the Kartas of the Joint family

#### **1.4 GST /SALES TAX/ Value Added Tax (VAT):**

1.1.1 Applicable Taxes where legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for GST/Sales/General taxes will be admitted at any later stage and on any ground whatsoever.

1.1.2 When GST/Sales/Central Tax is claimed as extra by the Tenderer in general, and on packing charges in particular, the following certificates should be submitted by the Tenderer to the authority on the bills itself:-

- (a) Certified that the GST/Sales Tax is actually payable on the goods and packing charges as per the provisions of GST/Sales Tax/ Central Sales Tax or the State Sales Tax Act or the rules made thereunder and the amount charged on account of Sales Tax on these goods and packing charges

are not more than what is payable under the provision of relevant Act or the rule thereunder.

- (b) Certified further that we have actually paid GST/Sales Tax/Central Sales Tax *and* are being assessed to Sales Tax on packing charges and also that where there are statutory exemptions, under the relevant Act/Law of the State Government concerned, we have availed ourselves of it and certified non-availability of such a provision for Sales Tax on packing charges claimed.
- (c) Certified that in respect of amount claimed in the bill, no claim is pending for refund or is admissible. Certified that in the event of our getting refund in whole or in part of the element or Sales/Central Sales Tax on packing charges, claimed for government, we shall pass on the benefit to STIC by remitting to government the amount equivalent to the amount of refund obtained by us.
- (d) Certified further that we (our Branch of Agent).....(address) is registered as dealers in the State of ..... under central Reg.No.....**and in the state under local Reg. No.....** for the purpose of State Tax. When the Tender is signed by a constituted attorney of the sole proprietor of a concern or when the tenders is on behalf of the firm by a constituted attorney of its partners as provided in sub-clauses (i) and (ii) above, then original power of attorney appointing him as such constituted attorney of its partners as provided in sub clauses (iii) above, the original power of attorney along with resolutions (if it is required under its article of association) authorizing the affixation of its common seal on the power of attorney and a copy of its articles of Association shall be attached with the tender. If, however, the power of attorney has been previously furnished to and approved by STIC KOCHI, the Tenderer need not send the same with the Tender, again. Failure on the part of Tenderer to comply with the instructions contained in this clause, shall render the Tender for rejection.
- (e) „C“ and „D“ forms are not applicable to STIC KOCHI. As such, taxes actually leviable, should be quoted.

## **1.5 EXCISE DUTY ( Now GST)**

1.5.1 Any stores/goods/equipments to be supplied to STIC KOCHI are exempt from payment of Central Excise Duty. Necessary certificate shall be provided to the Supplier before supply of the order. The Commercial Bid from Indian Suppliers should contain the Basic Price and percentage of Excise Duty should be shown separately.

1.5.2 If it is desired to ask for excise duty or any other charges, as extra, the same must be specifically stated. In the absence of any such statement no claim for the same will be entertained (where the excise duty is leviable on *advalorem* basis, the tenderer should submit along with the tender the form-1 and the Manufactures" price List showing the actual assessable value of the stores/goods/equipments, as approved by the Excise authorities.)

1.5.3 In the case any refund of excise duty is granted to Tenderer by the Excise Authorities in respect of stores/goods/equipments supplied under the contract he will pass on the credit to STIC KOCHI immediately along with a certificate to the effect that the credit so passed on relates to the excise duty originally paid for the stores/goods/equipments supplied under the contract. In case of failure to do so within 10 days of the issue of the excise duty refund order to Tenderer by the Excise Authorities, STIC KOCHI would be empowered to deduct a sum equivalent to the amount refunded by the Excise Authorities without any further reference to Tender from any of the outstanding bills against this or any other pending Government Contracts and that no dispute on this account would be raised by the Tenderer.

1.5.4 The Tenderer is also required to furnish to the paying authority the following certificates:-

- (a) Certificate with cash bill to the effect that no refund has been obtained in respect of the reimbursement of excise duty made to Tenderer during three months immediately preceding the date of the claim covered by the relevant bill.
- (b) certificate of the tenderers auditor whether any refunds have been obtained or applied for by them or not in the preceding financial year, after the annual audit of their accounts also indicating details of such refunds / application, if any should be given. The certificate should contain reference to all Purchase order/contracts held by the Tenderer.

- (c) A certificate along with the final payment bills of the firm to the effect whether or not they have any pending appeal/protest for refund or partial refund of Excise Duties already reimbursed to firm by the Government pending with the Excise Authorities and if so, the nature of the amount involved, and the position of such appeals. The authorized officials as mentioned in foregoing concerned paras should sign the certificate.
- (d) An undertaking to the effect that in case it is detected by the STIC KOCHI that any refund from Excise Authorities was obtained by the Tenderer after obtaining reimbursement from the paying authority and if the same is not immediately refunded by the Tenderer to the paying authority giving details of particulars of the transaction, paying authority will have full authority to recover such amount from the Tenderer outstanding bills against that particular contract or any other pending STIC KOCHI contracts and that no dispute on this account would be raised by the Tenderer.

## **1.6 PAYMENT TERMS**

***For Domestic Goods:*** Payment of 90 % of the contract value on receipt and acceptance of goods by STIC KOCHI at destination and on production of all required documents by the supplier and balance 10% on successful installation and commissioning and submission of Performance Bank Guarantee.

***For Imported Goods :*** Payment of 90 % net FOB/FAS price against invoice, inspection certificate (where applicable), shipping documents etc. and balance 10% on successful installation and commissioning and submission of Performance Bank Guarantee.

## **2. *FOR FOREIGN SUPPLIERS***

- 2.1 Cost of the items should be mentioned clearly in the Commercial Offer (Part-II) only. The optional and any other essential items / accessories required for the maintenance of the equipment for the next Five years should also be specified in the offer separately.
- 2.2 All costs should be given in Indian rupees and/or in a convertible currency like US-\$, UK- Pounds, Japan- Yen, Other European Countries- Euro. STIC is having DSIR registration for customs duty exemption.

- 2.3 For evaluation and comparison of offers on equitable basis, all quoted prices will be converted into Indian Rupees as per the selling exchange rates established by RBI/SBI as prevailing on the date of opening of Financial bids.
- 2.4 The Principal Supplier should clearly indicate the address of its Indian Agent, if any, and percentage (%) of Agency Commission payable, if any.
- 2.5 The Indian Agent should produce a copy of the Agency Agreement with the foreign principal giving the precise relationship between them and their mutual interest in business.
- 2.6 In case of tender submitted by an Indian agent, a copy of their registration certificate with DGS&D, New Delhi under the compulsory Scheme of Ministry of Finance regarding the registration of Indian Agent of foreign supplier has to be enclosed.
- 2.7 The Bidder should indicate the names of the reputed Indian organizations, IITs, IISERs, CSIR Labs and other scientific and technical institutes and Universities where the Bidder has supplied similar equipment and attach satisfactory performance report of the equipment from the user organizations.
- 2.8 Details of services rendered by the Bidder as well as after-sales services offered by him should be made clear in the Bid.
- 2.9 The Tenderer's conditions printed on the tender or otherwise sent along with the tender shall not be binding on STIC KOCHI.
- 2.10 Supply means "Supply, Installation, Commissioning and satisfactory demonstration of the whole system and training". If there are any extra charges for Installation, Commissioning and training, the same should be specified in the commercial offer.
- 2.11 The address of Principal's/Manufacturer's and their Banker's details should be furnished.
- 2.12 STIC KOCHI'S DSIR Certificate is covered under EXIM policy of 2002  
- 2007.
- 2.13 Installation is to be arranged by the supplier free of cost, and the same is to be done within 15 days of the arrival of the equipment at site.



- 2.14 The makes / brand and name and address of the manufacturer, Country of Origin, Country of Shipment and currency in which rates are quoted are to be mentioned.
- 2.15 The payment of local currency portion shall be payable in equivalent Indian Rupees, within 30 days after the receipt of the equipment in good condition and after satisfactory installation and commissioning and demonstration.
- 2.16 Details of onsite warranty, agency that shall maintain the supplied stores/goods/equipments during warranty and undertake Annual Maintenance Contract (AMC)/Comprehensive Service Maintenance Contract beyond warranty shall be given in the offer. In case of foreign supplier, the Indian Agent who shall maintain supplied stores/goods/equipments during warranty and provides maintenance beyond warranty shall be given in the Technical Offer.
- 2.17 The supply of spare parts is to be guaranteed at least for a period of 10 years after the supply of the equipment. GTC Clause 14 for supply of spare parts shall apply in addition to this.
- 2.18 The price of imported stores/goods/equipments shall be quoted specifying:
- (a) F.O.B. Prices in any foreign currency and/or Indian rupees equivalent and port of shipment.
  - (b) C.I.F. Prices in any foreign currency and/or Indian Rupees equivalent.  
F.O.R destination - in Indian Rupees only.  
The estimated cost of the freight and insurance should be specified separately and individually.
  - (c) Agency Commission payable to Indian agent, if any, included in the F.O.B. / C.I.F. price should be given separately.
  - (d) The stores/goods/equipments are required to be installed at STIC, Kochi and subsequent Training to be provided to STIC's employees shall be arranged by the Seller, free of cost, at the place of consignee.
- 2.19 PAYMENT TERMS
- Payment shall be made through irrevocable Letter of Credit (L.C.) in favour of the foreign supplier through STIC KOCHI's banker.
- 2.20 Shipment should be effected as far as possible through Air.

2.21 FORWARDING OF SHIPPING DOCUMENTS ETC. TO THE CONSIGNEE

- 2.21.1 Port of Delivery shall be intimated by The Director STIC KOCHI.
- 2.21.2 Advance shipment intimation shall be sent to The Director STIC KOCHI, by the Tenderer, as required in the purchase order.
- 2.21.3 After completion of the shipping arrangements by the supplier, he shall promptly provide STIC KOCHI with the original Airway bill and copies of Airway bill showing air freight charges, freight sheets, invoices, and packing slips to enable STIC KOCHI to arrange for the clearance of goods from the Indian Customs.
- 2.21.4 The Supplier shall also provide to STIC KOCHI a set of documents containing the following : -
- i) Commercial Invoice in triplicate
  - ii) Packing list in triplicate
  - iii) Evidence of Dispatch (A copy of non-negotiable AWB copy)
  - iv) Certificate of origin country
  - v) Manufacture's guarantee and Inspection certificate

2.22 INSPECTION AND WARRANTY:

- 2.22.1 The inspection of the consignment on receipt in India shall also be carried out before taking over by STIC KOCHI, by the ultimate consignee or his nominee.
- 2.22.2 In all cases, whether inspection is carried out by STIC KOCHI's Inspector or not, Manufacturer's Test Certificate shall invariably accompany the equipment.
- 2.22.3 Instruments / Equipments /Components and all the materials, supplied against the order must be provided with guaranty /warranty against manufacturing and functional defects as given below and the date of warranty / guarantee shall commence from the date of installation / commissioning.

<b>Item no.</b>	<b>Tender Reference No</b>	<b>Name of the Equipment</b>	<b>Warranty period</b>
01	STIC/SAIF/XRD/ 2018-19/525	X-ray Diffractometer with accessories	5 years
02	STIC/SAIF/ICPMS/ 2018-19/526	(i) ICP-MS with auto sampler and accessories (ii) Micro wave digester and accessories (iii) Ion Chromatograph and accessories (above 3 items should be quoted individually)	5 years

### **2.23 Other Terms:**

2.23.1 Agency Commission: Shall be payable to Indian Agent, after installation and testing of the equipment. The payment shall be made in Indian Rupees only.

2.23.2 Banking / L.C. Charges: In India on STIC KOCHI's account and abroad on Supplier's account, at actuals on opening of L.C. All charges for amendment of L.C. after its opening shall be on Supplier's account.

2.23.3 Freight, Clearing etc. : On STIC KOCHI's account, payable in Indian Rupees.

2.23.4 The supplier shall be responsible for obtaining permission for export from the govt. of the country of origin. All expenses in this regard will be borne by the supplier.

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**SECTION IV: GENERAL TERMS AND CONDITIONS (GTC)**

## **SECTION IV: GENERAL TERMS AND CONDITIONS (GTC)**

### **1. Criteria for pre-qualification of tender and negotiations**

Specifications conform to the requirement or better than that, Past Performance, Financial Soundness, Technical Competence, Total Cost and Organizational Capability of the Tenderer to provide installation, commissioning, after sale service and spare parts supply shall be some of the crucial parameters for pre-qualification of tenderers to be called for negotiations.

### **2. Re-tendering**

On finding inadequate response to Tender Notice or if the Prices quoted are substantially high and negotiations with the tenderers have not resulted in any positive response STIC KOCHI may accept or order re-tendering.

In case a ring is suspected, re-tendering will normally be resorted to.

### **3. Price escalation**

Procurement will normally be based on firm prices, excepting where material costs are likely to be dependent upon statutory variation or are liable to wide fluctuations as in the case of non-ferrous metals. In such cases, to determine the escalation, documentary proof, shall be produced by the supplier.

### **4. Performance Security Deposit**

4.1 The Performance Security Deposit as per IBIB Clause 26.1 shall be for entire period from acceptance of Contract to completion of warranty plus 60 days.

4.2 The proceeds of the Performance Security Deposit shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.

4.3 The Performance Security Deposit will be discharged by STIC KOCHI and returned to the Supplier not later than 60 days following the date of completion of the Supplier's performance obligations, including the warranty obligations under the contract.

4.4 In the event of any contract amendment, the Supplier shall, within 21 days of receipt of such amendment, furnish the amendment to the Performance Security Deposit, rendering the same valid for the duration of the Contract, as amended for further period of 60 days thereafter.

## **5. Country of Origin**

- 5.1. All Goods and Services supplied under the Contract shall have their origin in the member countries and territories eligible.
- 5.2. For purposes of this Clause “origin” means the place where the Goods produced, or from which the Services are supplied. Goods are produced when, through manufacturing, processing or substantial and manor assembling of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.
- 5.3. The country of origin of Goods and Services is distinct from the nationality of the Supplier.

## **6. Standards**

The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications and when no applicable standard is mentioned; to the authoritative standard appropriate to the Goods country of origin and such standards shall be the latest issued by the concerned institution. The goods to be supplied shall be new only.

## **7. Patent Rights**

The Supplier shall indemnify STIC KOCHI against all third-party claims of infringement of patent, trademark, Copy Right or industrial design rights arising from us of the Goods or any part thereof in India.

## **8. Tender Specifications**

- 8.1 The specifications for the items quoted should be explicitly clear and all available technical literature, catalogues and other data in support of the specifications of the items should be furnished along with the Tender. In the event of an alternative offered by the Tenderer, full specifications, details, literature, etc., which may justify consideration of such alternative offer, need to be given.
- 8.2 It should specifically be mentioned as to whether the price quoted includes all taxes and duties. Sales tax and/or other duties and levies where legally leviable and intended to be claimed should be distinctly shown separately in the Tender. Packing, Forwarding and handling charges, etc., if any, to be quoted separately.
- 8.3 The Tenderer should provide all the information asked for in the Form for Details about the Tenderer.

- 8.4 The Tenderer has to state in detail the Electrical Power/UPS requirements, floor Space, head room, foundation needed and also to state whether Air conditioned environment is needed to house the system and to run the tests, i.e., pre-installation facilities required for installation, may please be intimated in the Technical Bid.

## **9. Validity of Tender:-**

The quotations should be valid, for a period of 90 days from the last date of receipt of the Tender.

## **10. Inspections and Tests**

- 10.1 STIC KOCHI or its representative shall have the right to inspect and/or to test the Goods and services to confirm their conformity to the Contract specifications at no extra cost to STIC KOCHI. STIC KOCHI shall notify the Supplier in writing in a timely manner of the identity of any representatives retained for these purposes.
- 10.2 The inspections and tests may be conducted on the premises of the Supplier or its subcontractor(s), at point of delivery and/or at the Goods final destination. If conducted on the premises of the Supplier or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production data shall be furnished to the inspectors at no charge to STIC KOCHI.
- 10.3 Should any inspected or tested Goods fail to conform to the specifications, STIC KOCHI may reject the goods and the Supplier shall either replace the rejected Goods or make alterations necessary to meet specification requirements free of cost to STIC KOCHI.
- 10.4 STIC KOCHI's right to inspect test and, where necessary, reject the Goods after their arrival at Project Site shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by STIC or its representative prior to the Goods shipment.
- 10.5 **Nothing in GTC Clause 10 shall in any way absolve** the Supplier from any warranty or other obligations under this Contract.

## **11. Packing**

The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights shall take into

consideration, where appropriate, and the remoteness of the Goods final destination and the absence of heavy handling facilities at all point in transit.

## **12. Delivery and Documents**

Delivery of the Goods and services shall be made by the Supplier in accordance with the terms specified by STIC KOCHI in the Purchase Order.

## **13. Insurance**

Insurance shall be arranged by STIC KOCHI for the Goods supplied under the Contract in Indian Rupees against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery.

## **14. Spare Parts**

The Supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:

14.1 Such spare parts as STIC KOCHI may select to Purchase from the Supplier, providing that this selection shall not absolve the Supplier of any warranty obligations under the Contract; and

14.2 In the event of termination of production of the spare parts:

- i. Advance notification to STIC KOCHI of the pending, termination, in sufficient time to permit STIC KOCHI to procure needed requirements; and
- ii. Following such termination, furnishing at no cost to STIC KOCHI, the blueprints, drawings and specifications of the spare parts, if requested.

14.3 Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spares. Other spare parts and components shall be supplied as promptly as possible but in any case within one month of placement of order.

## **15. Warranty**

15.1 The Supplier warrants that the Goods supplied under this Contract are new, unused, of the most recent or current models and those they incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The Supplier further warrants that all Goods supplied under



this Contract shall have no defect arising from design, materials or workmanship (except when the design and/or material is required by STIC KOCHI's Specifications) or from any act or omission of the Supplier, that may develop under normal use of the supplied Goods in the conditions prevailing in the country of final destination.

**15.2 This warranty shall be as mentioned in Technical Specification, including the service/maintenance/repair warranty, after the Goods or any portion thereof as the case may be, have been delivered, commissioned and accepted at the final destination indicated in the Contract. ( Also refer to clause 2.21 of STC )**

- 15.3 STIC KOCHI shall promptly notify the Supplier in writing of any claims arising under this warranty
- 15.4 Upon receipt of such notice, the Supplier, with all reasonable speed, repair or replace the defective goods or parts thereof, free of cost at the ultimate destination. The Supplier shall take over the replaced parts/goods at the time of their replacement. No claim whatsoever shall lie on STIC KOCHI for the replaced parts/goods thereafter.
- 15.5 If the Supplier, having been notified, fails to remedy the defect(s) within a reasonable period of one month, STIC KOCHI may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which STIC KOCHI may have against the Supplier under the Contract.
- 15.6 If the down time is more than eight hours, supplier shall provide temporary replacement of the defective component and remove the defect. If the downtime is more than seventy two hours then the warranty period will be extended by one month for entire contract.
- 15.7 The Bidder must indicate who will maintain equipment/instrument after warranty period (post warranty) by giving the name of Firm, address, contact person, phone no. and fax no. email etc in the Technical Bid.
- 15.8 The Bidder has to quote rates for Annual Maintenance Contract (AMC), if any, only in Commercial Bid.

## **16. Payment**

- 16.1 The methods and conditions of payment to be made to the Supplier under this Contract shall be specified in the STC.
- 16.2 The Supplier's request(s) for payment shall be made to STIC KOCHI in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and the Services performed, and by documents, submitted pursuant to GTC Clause 12, and upon fulfillment of other obligations stipulated in the contract.

## **17. Prices**

Prices payable to the Supplier as stated in the Contract shall not be changed and remains applicable during the performance of the Contract.

## **18. Penalty Clause**

Subject to GTC Clause 20, if the Supplier fails to deliver any or all of the Goods or to perform the Services within the period(s) specified in the Contract, STIC KOCHI shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as penalty, a sum equivalent to the percentage specified in Clause 21 of the delivered price of the delayed Goods or unperformed Services for each week or part thereof of delay until actual delivery or performance, up to maximum deduction of the percentage specified therein. Once the maximum is reached, STIC KOCHI may consider termination of the Contract pursuant to IBIB Clause 26 resulting in forfeiture of the Performance Security Deposit.

## **19. Force Majeure**

20.1 Notwithstanding the provisions of GTC Clause 19, the Supplier shall not be liable for forfeiture of its performance security, penalty or termination for default, if and to the extent that, its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

20.2 For purposes of this clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the Purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.

20.3 If a Force Majeure situation arises, the Supplier shall promptly notify STIC in writing of such conditions and the cause thereof. Unless otherwise directed by STIC KOCHI in writing, the Supplier shall continue to perform its obligations under the Contract as far as it is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure.

## 20. Liquidated Damages

The applicable rate is 0.5% of contract value per week and the maximum deduction is 10% of the contract price.

## 21. Applicable Law

The Contract shall be interpreted in accordance with the laws of the Union of India.

## 22. Applicability to Other Terms and Conditions

These General Terms and Conditions shall apply to the extent that they are not superseded by provisions in other parts of the Contract.

## 23. Exemptions and preferences to small scale industries

The Small Scale Industries registered with National Small Industries Corporation (NSIC) or with Directorate General of Supply and Disposal (DGS&D) will be given following exemption and preferences in terms of letter No. 21(1)/2000FP&M dated 28.8.2000 of Ministry of Small Scale Industries & Agro and Rural Industries, New Delhi on production of necessary registration. i. Issue of Tender sets free of cost.

- ii. Exemption from Payment of Earnest Money Deposit or Bid Security
- iii. Waiver of Performance Security Deposit to the Monetary limit for which the unit is registered.

## 24. Tenderers must ensure the following while submitting the Tender:-

24.1 Tenderer should state whether he is a relative of any employee of

STIC, KOCHI and give the following certificate in the form for details of the Tenderer (s):

“ I / We have fully understood the foregoing general terms & conditions **of tender as well as the special terms and conditions** and having accepted the same in toto and I / we have made my / our offer keeping in view those terms and conditions. I / we fully agree that once I / We have endorsed in whatsoever and whichever way my / our signatures herein below all conditions whatsoever way mentioned by me / us which may not be acceptable to you / your principals shall be deemed to be / withdrawn by me / us and am/ are fully aware that no grievances whatsoever shall be entertained by you if our tender / quotation is not accepted / finalized.”

- 24.2 Tenderer sending their tenders by post/courier (mail) will do so solely at their own risk and STIC will not be responsible for any loss in transit or postal delay.
- 24.3 Discount offered should be mentioned clearly in the commercial bid only.
- 24.4 The item should be supplied with manuals and the manuals including technical drawings should be complete in all respects to operate the system without any problem. If the manuals are on chargeable basis, the same should be specified in the offer.
- 24.5 It should be noted by the Tenderer(s) that by entering into this contract STIC is not precluded from entering into similar contracts with anyone else of their choice at any time during the continuance of this contract.
- 24.6 The supplier on receipt of the Purchase order must acknowledge.
- 24.7 STIC KOCHI shall have the right to issue addenda to tender documents to clarify amend, modify, supplement or delete any of the conditions /clauses or items stated therein. Each addendum so issued shall form part of original invitation to the Tender.
- 24.8 In case the Bid is not accepted, or otherwise STIC KOCHI has elected to withdraw or cancel the invitation to the Tender for which STIC KOCHI shall, have the right to do so, at any time, the Tenderer shall not be entitled to claim any cost/charges/expenses incidental to or incurred by the Tenderer through or in connection with the submission of the offer. The Earnest Money Deposit paid by the Tenderers with the Tender will be refunded to them in due course without interest.

**25 Installation:** Bidder shall be responsible for installation / demonstration wherever applicable and for after sales service during the warranty and thereafter.

- 25.1 The equipment is to be guaranteed for trouble free performance as per warranty clause. The defects, if any, during the guarantee period are to be rectified free of charge by arranging free replacement wherever necessary.
- 25.2 Pre installation information to be supplied 3 months before dispatch date.
- 25.3 Electrical power supply -  
220V, 50 Hz, 1 phase (or) 400 V , 50 Hz , 3 phase  $\pm 10\%$

- 26** Quantities given in the tender specifications are approximate only and one or more of the items of the stores/goods/equipment tendered for a portion of one or more of the items of such stores/goods/equipment may be accepted and notwithstanding that the tender has not been accepted in whole, supplier shall be bound to supply to STIC KOCHI such items and such portion or portions of one or more of the items as may be accepted by STIC.
- 27** The Director STIC KOCHI reserves the right to accept the tender in full or in part or to reject the lowest or any or all tenders without assigning any reason.
- 28** No Sub-contracting will be allowed for installation or maintaining system/equipment/instrument during or after warranty period.
- 29** The Tenderer should note that the General Terms and Conditions are in addition to the Special Terms and Conditions of Tender, which form an integral part of the General Terms and Conditions of the Tender, and any of the General Terms and Conditions of Tender may be altered by the Special Terms and Conditions of Tender.

**30. Cancellation of order**

STIC KOCHI reserves the right to cancel the order without any liability in case the stores/goods/equipments are not supplied within the stipulated period and for nonfulfillment of specifications.

**31. Replacement of parts**

If any equipment or part thereof be lost or rendered defective during transit, a fresh order will be placed on the supplier for such loss or defective equipment, in which case the supplier shall arrange for the supply of the equipment or part thereof, as the case may be, within three months of date of such order free of cost, allowed in the original order on the same general terms and conditions.

**32. Arbitration**

Any dispute between the parties on the purchase would be settled by arbitration. The place of arbitration proceedings shall be at the place of the consignee. Applicable laws shall be laws of Union of India.

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**SECTION V - TECHNICAL SPECIFICATIONS**

## **1. Technical Specification for Floor Model Powder X-ray Diffractometer with accessories**

**Tender Ref. No.: STIC/SAIF/XRD/2018-19/525**

### **1. Basic System configuration**

- The X-ray Diffractometer to be supplied should be primarily designed for performing X-ray diffraction studies on various samples (powder, thin films, polymer blocks etc.) and grazing incident diffraction (GID) for polycrystalline thin film. The offered XRD system must be upgradable in future at site for various other applications like Texture and Residual Stress, SAXS, Reflectometry etc. It has to be an integrated system inclusive of X-Ray source, X-Ray Generator, Primary & Secondary optics, Goniometer, Sample stage and detector assembled in suitable radiation shielded cabinet. The detailed specifications of individual modules must comply with following requirements.

### **2. X-ray Generator:**

- Voltage: 20-50 kV or better with an increment of 1 kV or better controllable through external PC.
- Max. Current: 5-60 mA or better with an increment of 1 mA controllable through external PC.
- Power: Max power should not be less than 3 kW.
- Output stability:  $< 0.005\%$  for high voltage and current at 10% variation of mains
- Input power should be single phase 220/230V  $\pm 10\%$ , 50-60 Hz

### **3. X-ray tube**

- Ceramic X-ray Tube, minimum 3.0 kW Rating, Long Fine Focus (one line and one point focus); Cu Target.
- Additionally, one Molybdenum X-Ray tube, minimum 3.0 kW rating
- Tube voltage: Minimum 20-50 kV or better
- Tube current: Minimum 5-60 mA or better
- Tube Mount: Easy switching from line focus to point focus without disconnecting any water hose or High Voltage Cable and opening the tube housing.

#### 4. Goniometer

- High-resolution vertical goniometer with theta-theta configurations which can be used for Bragg-Brentano reflection geometry, transmission geometry and parallel beam geometry.
- $2\theta$  Angular range:  $-10^\circ < 2\Theta < 160^\circ$  or higher range
- Angle positioning: Stepper motors with optical encoders for optimum scanning speed and positioning precision.
- Sample stage in horizontal position
- Scan speed:  $0.001^\circ$  / minute to  $10^\circ$ /min or better
- Angular reproducibility  $\pm 0.0002^\circ$   $2\theta$  or better.
- Minimum step size:  $0.0001^\circ$   $2\theta$  or lower
- Diameter: minimum diameter of 500 mm.
- Peak position accuracy should be  $\pm 0.01^\circ$  for entire  $2\Theta$  angular range and to be verified at site against a NIST Standard
- Scan mode:  $\theta_s/\theta_d$  coupled and  $\theta_s/\theta_d$  decoupled, The Goniometer should be with independent  $\theta$  and  $2\theta$  drives for accurate positioning. It should perform Continuous scan, Step scan, Fast scan, Rocking curve.

#### 5. Optics

- Necessary computer controlled variable divergence slit.
- Necessary computer controlled Anti scatter arrangement & suitable Soller Slits for use with parallel beam geometry.
- Variable slits, filters, and optics systems to be included in the system for all the applications.
- Fully Automated Motorized Optics change from (Bragg -Brentano to Parallel Beam geometry and vice versa with variable slits and parabolic curved multilayer mirror in Primary side and variable slit and Equatorial Soller Slit in Secondary side.
- Alignment free (automated)
- Proper K -beta filtering
- Motorized Anti Scatter Slit to improve signal to back ground ratio.
- **Polycapillary optic** in the primary side for Texture and Residual Stress application to be quoted as **Optional** item.

#### 6. Sample stage

- Rotating/spinning sample stage
- Rotation speed should be selectable by system software
- Necessary sample holder (Steel/Aluminum / PMMA type) – 15 Nos.
- Si low/zero back ground sample holder with flat single crystal- 3 nos.
- Transmission Sample Cup
- Foils for use during sample analysis in transmission mode



- Easy mounting of different sample stages without major alignment will be highly preferred
- Sample stage for Texture and Residual Stress measurement (**Optional**) – Eulerian Cradle stage with motorized chi, phi and Z movement. X and Y movement should be provided

## 7. Detector

- 1-Dimensional ultrafast detector suitable for Cu, Co, Mo, Ag, Cr x-ray radiation. Necessary switching over to 0D 1D and 2D mode. The detector must have built-in energy discriminator to take care of sample fluorescence while working with Copper x-ray tube. Vendor should clearly mention the energy resolution of the detector in their quotation. The detector must be air cooled and should not use any liquid or gas in its operation.

## 8. Calibration Standard

- NIST Standards (SB-15 Si and Si/Corundum) should be supplied along with main equipment. Performance on peak position and FWHM as per the NIST certificate to be demonstrated at the time of installation and commission.

## 9. Electronics

- The electronics should have an integrated shutter control and capable of monitoring and controlling all diffractometer functions such as angles, counts, slits, generator safety, etc.

## 10. Software

- The software should be capable of simultaneous Diffractometer control, data collection and analysis, peak search, search-match and elaborate pattern treatment such as data smoothing, background subtraction,  $K\alpha_2$  stripping, Crystallinity determination
- Instrument monitoring maintenance tool software. Ten-year Free updates to be provided.
- Optional software package: Data collection & data evaluation software for Pole figure analysis, orient distribution function (ODF), Texture and Residual Stress to be quoted in Option.
- Software should be compatible with windows 10 Operating system

## 11. Chiller Unit

- Suitable closed loop chiller to cool the X-ray sources and Generator to be quoted. The Chiller unit must have in-built safety mechanism against water pressure/flow rate & water temperature variation. The water chiller must have

external display for water temperature (inlet and outlet), water flow rate. Necessary alarms to be built-in to the chiller in case of there is any deviation from the set temperature and water flow rate as an additional protection mechanism of the XRD system from any major failure. The chiller quoted must be manufactured in India by reputed Indian manufacturer having their service facility in southern part of India/Kerala. Imported Chiller will be considered only in case authorized after sales service support is available directly by the OEM in Southern part of India.

## **12. Safety**

- As per the highest international standards and regulations, fully X-ray protected enclosure safety system is essential. X-ray protected enclosure as per international safety norms and CE certified, EC declaration of conformity certificates is essential and should be provided along with system.
- The X-ray leak rate should be  $< 1 \mu\text{Sv/hr}$  which should be measured and certified by the supplier.
- Leak current breaker
- Shutter malfunction detection
- Any other safety requirement which supplier feels essential & necessary and not covered above may be included in the scope of supply.
- The quoted XRD system must be approved by AERB, Mumbai

## **13. Performance Guarantee**

- System should be guaranteed for auto alignment accuracy. The accuracy of each peak position should be equal or better than  $\pm 0.01^\circ$  (2Theta) over the whole angular range based on the internationally accepted Standard Reference Material by NIST.

## **14. Computer & Printer**

- Compatible branded computer with genuine OS Windows (Windows 10) loaded with all the required software, Processor- Intel core i5 or better, RAM-8 GB or better, HDD-1TB or higher, Graphics Card, Additional internet port, LED Monitor-23 inch or large, mouse and keyboard.
- Suitable Colour Laser jet Printer to be included.

## **15. Manual**

- Operation and maintenance manuals in English language should be supplied along with the system

## 16. Installation and Commissioning

- The XRD machine to be installed, tested and commissioned by the manufacturer's qualified engineer and performance must be tested by the engineer on supplied standard.

## 17. Warranty & Spares

- 5 Years comprehensive warranty including consumables and x-ray tube after successful installation/commissioning.
- The Spares and service support from the supplier should be available for minimum 10 years from the date of installation of the XRD system.

## 18. Essential Spares and Consumables

- Tool kit with all mechanical tools and accessories for the system installation and regular operation should be provided. Necessary spares and consumables required for smooth and efficient operation of X-ray Generator and goniometer for 5 years should be listed separately as optional item.

## 19. Training

- Necessary training to STIC scientific staffs on Operation, Maintenance, Calibration of the offered system and X-ray diffraction studies will have to be provided for minimum 5 working days after the installation of the system. This is an integral part of the acceptance criteria of the XRD system by the user.

## 20. Additional Software

- Please quote separately for original and latest release ICDD PDF2 data base.
- A comprehensive and vendor integrated advanced GUI crystallographic Software should be offered separately for powder pattern analysis, Rietveld refinement, Structure refinement and Phase Quantification with Proper Training

**Crystallographic and Rietveld based quantitative phase analysis software which should cover:**

- Qualitative analysis
- Phase quantification
- Peak/Line Profile analysis
- Lattice parameter determination
- Crystallite size determination
- Percentage of Crystallinity determination
- Phase quantification based on Rietveld method
- Unit Cell determination

- Space Group determination
- Electron density Fourier Mapping
- Ab-initio Structure determination Method

**All software licenses must be in the name of the STIC, Cochin University.**

### **21. UPS /Power requirements**

- True online UPS of suitable capacity with power factor correction and harmonic distortion (< 5 % THD ; < 3% Single Harmonic), Three phase input and 440V for the smooth running of ICP-MS with tubular battery (Brand- Pansonic/ Exide /Ameron) with back up of 45 min. (Brand APC/Emerson/Numeric ). **Quote Separately**

## **Terms and Conditions**

1	Model and year of introduction of the instrument	Shall be mentioned in the tender along with original brochures /catalogue. Though the specifications given are of basic and general in nature, preference will be given for selection of latest higher-end versions. Therefore, bidders are advised to quote for different models.
2	Place of installation	At SAIF LAB of STIC, Cochin University campus
3	Warranty	(i) 5 years comprehensive warranty from the date of completion of installation for the complete system including replacement of instrument and parts, spares, accessories and labour charges. (ii) Complete set of spares and consumables as standby shall be provided/made available along with the equipment or from time to time during the period of warranty. (iii) The repair/servicing and periodic IPV (Instrument Performance Verification) of the equipment with traceable standards have to be carried out by the manufacturer/supplier free of cost during the entire warranty period, or extended warranty period irrespective of any number of repair / services. (iv) Definite time schedule for servicing of equipment, time required for attending break-downs, etc shall be indicated in the terms & conditions for warranty and AMC. (v) Shall provide good after sale service/technical support capable of attending on short notice at places where the equipment is installed. At least 2 preventive maintenance visits and unlimited breakdown calls by the service/application support engineer during the warranty period, every year.

		(vi) The manufacturer / supplier shall give a warranty certificate as per the format attached in the tender Document ( <b>Annexure I</b> )
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4	After sales service	<p>(i) Shall provide for annual maintenance contract / after sales service contract after the warranty period.</p> <p>(ii) The cost/rate and the terms and conditions for AMC and IPV for three years, after the warranty period (6<sup>th</sup>, 7<sup>th</sup> &amp; 8<sup>th</sup> years) have to be specified.</p> <p>(iii) The payment terms for the AMC shall be as per the Rule 159 of GFR 2005 (Govt. of India) and amendments there to.</p> <p>(iv) Definite time schedule for servicing of equipment, time required for attending break-downs, etc shall be indicated in the terms &amp; conditions for AMC.</p>
5	Training of personnel	<p>(i) Basic Application and maintenance training after installation of the equipment to our technical personnel of the concerned laboratories.</p> <p>(ii) Application training at factory site for minimum one person should be provided free of cost.</p> <p>(iii) Trouble shooting training as and when required.</p>
6	Experience	The supplier shall have experience of at least 10 installations and operation of the equipment in India, including the model quoted.
7	Specification sheets	Detailed specification sheet(s) highlighting all the technical and other specifications must be attached ( <b>Annexure III</b> ).
8	Users List	Complete list of users in India for the equipment (inclusive of the quoted model) along with certificates/testimonials from the customers shall be enclosed.

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## 2. Technical Specifications for ICP-MS with autosampler and accessories

**Tender Ref. No. STIC/SAIF/ICPMS/2018-19/526**

### **Introduction**

A complete space saving, compact ICP-MS system coupled with IC for speciation studies with auto sampler, with required exhaust and drain along with micro wave sample preparation system.

The system should be capable of analyzing accurately and precisely of common, rare, toxic elements, trace elemental profiling of metals at trace and ultra-trace level (% , ppm, ppb and ppt) in various type of environmental samples such as water, soil, sediments, sludge and waste extracts/digests, municipal and industrial solid wastes industrial, mining/metallurgy, natural water systems/hydrogeology, geology & soil science, biological/forensic, food, pharmaceutical samples organic solvents and Sea water. The system should have the capability to perform analysis from high concentration (%) to ultra-trace level (ppt) in a single run without any dilution. The system should have the capability to eliminate polyatomic and isobaric interferences, and acid matrices effectively and analyze the sample precisely. The system should be easy to use and the vendor should be ready to give lifetime technical support. The vendors should demonstrate the performance of their system for wide range of samples to meet the expectations of the customer.

The instrument must be suitable to follow the guidelines of International Food Safety Standards and Regulatory Agencies such as Codex, USFDA, and European Commission.

The system should be compatible with IC, HPLC and GC coupling.at present or in future. Instrument interfacing with ICP MS is the responsibility of the ICP MS supplier

For a complete solution following modules need to be provided.

**(i) ICP-MS with auto sampler and accessories**

For a complete solution following modules need to be provided

No.	Specifications	Requirements
1	Mass Range (amu)	4 - 260 amu or better
2	Scan Speed	3500 amu/sec or better
3	LC/GC/IC Interface	Shall have a provision to couple with HPLC /IC/GC for speciation studies
4	Auto sampler	Shall have fast, accurate and flexible sampling capacity. Capacity minimum 180 Vials of suitable capacity - 1000nos, along with corrosion resistant components should be supplied.
5	Sample introduction	ICPMS should be quoted with glass concentric nebulizer, spray chambers, quartz torch for efficient matrix decomposition, sample ionization, and quartz injector. Suitable to use with aqueous, organic and HF Peristaltic pump: It should have high precision minimum 4 channel computer controlled variable flow-rate. Nebulizer: It must include a PFA nebulizer having high resistance to corrosive acids such HF.  Spray Chamber: A Peltier cooled, temperature controlled quartz spray chamber (1 No). The Peltier temperature setting can be user defined in the range -10 to +20 °C or better.  High Matrix Capability: System should be capable of doing analysis in percentage level, ppm, ppb and ppt level in single run The system should be able to handle all type of samples ranging from clean water samples to high matrix samples with TDS ranging up to 20% or more with provision for direct aspiration without any need to dilute the sample. Argon gas dilution accessory to aspirate >20% TDS samples The vendor has to quote all required accessories to address high TDS.  The sample Introduction system should have very low dead volume with low uptake rate (0.25 ml/min or better) to reduce the waste generation. The sample introduction system, torch & cones should be easily accessible. Cones should be made of Nickel or platinum.

6	Ion source RF Plasma	<p>Solid-state digital RF generator 27 MHz or higher, variable power from 500 to 1600 W or better for automatic control of torch ignition, system warm up and shutdown</p> <p>Shall be significantly stable for varying sample matrix</p> <p>Single piece torch featuring quick dismount and remount fitting for easy maintenance</p> <p>3-axis position shall be fully adjustable under computer control</p> <p>Auto shut down after completion of analysis</p> <p>Plasma gas control should have at least 4 active flow controllers for control plasma, auxiliary, makeup &amp; carrier gases. The plasma should be fully controlled through PC of horizontal, vertical and sampling depth for maximum sensitivity and minimum polyatomic interference.</p> <p>Autotune facility / plasma view to optimize plasma conditions, lens and cell voltage, etc. for best ionization and sensitivity.</p>
7	Plasma Mode	Shall have cold and hot Plasma modes (specify)
8	Mass flow controller	Electronic high efficient mass flow controller (specify) for gas flow controlling.
9	Interfaces	<p>Sampler, skimmer cones/extraction system should be easily mountable and demountable. The cones should be accessible without breaking vacuum for easy maintenance. Systems which can access the ion lenses without breaking vacuum will be preferred as it will reduce the instrument downtime after routine maintenance or services. Cones should have larger orifice (&gt; 1mm) to minimize clogging.</p> <p>Suitable water-cooled interface under vacuum and with standard high-performance Ni and Pt sampling and skimming cones. Lens/cons system outside the vacuum system is preferred to reduce downtime.</p> <p>4 sets of Nickel and 2 set of Platinum cone (skimmer and sampler cone) should be supplies extra.</p> <p>The ion optics and extraction system should provide high ion transmission across the entire mass range. Ion focusing should be capable of minimizing interface background (<math>\leq 2</math> cps in no gas mode).</p> <p>Ion focusing system should be capable of removing all neutrals and photons from the ion path without causing any damage to the optics. The system should be capable of minimizing interface background.</p> <p>The system should have least maintenance components. The vendors have to give a maintenance chart for all the components that require frequent maintenance or replacement of consumables.</p>



10	Vacuum system	<p>A robust high efficiency vacuum system with 3 or more vacuum stage and minimum maintenance and utility with low noise level. The pumps should be a fume and acoustic free system. Safety mechanism against power failure. (Specify). Vacuum oil should be additionally for refilling.</p>
11	Quadrupole	<p>The quadrupole mass filter should be stable and provide resolution of 0.4 amu or better.</p> <ol style="list-style-type: none"> <li>1. The analyzer quadrupole must have the ability to discretely control the resolution of selected mass regions dynamically, without affecting the overall nominal resolution of the system for non-“custom-controlled” mass region.</li> <li>2. The Mass range should be from 4 - 260 amu or better to allow the analysis of radioactive elements &amp; Actinides.</li> <li>3. The Dwell time should be better than 0.1 ms (both pulse count and analog modes) for fastest settling.</li> <li>4. Quadrupole material: Made of molybdenum or better for a very low coefficient of thermal expansion.</li> <li>5. Scan speed &gt;3500 amu/s</li> <li>6. Quadrupole driven by digital RF generator (2 MHz or higher)</li> <li>7. Quadrupole with High Mass and Low mass cut off feature</li> <li>8. Quadrupole supply and replacement should be included in warranty</li> </ol>
12	Resolution & Stability	<p>0.4 amu or better</p> <p>ICPMS system should have good stability performance , bidders to enclose copy of their qualification stability test as concept of proof.</p> <p>Mass stability of <math>\pm 0.05</math> amu over 8 hrs or better</p> <p>Short term stability 3% RSD or better over 10 mins</p> <p>Long term stability 3% RSD or better over 120 mins</p> <p>Short term and long term Mass stability (specify)</p>

13	Sensitivity	<p>Sensitivity should be capable to quantify from ppt level to high ppm levels without dilution.</p> <p>Specify sensitivity at minimum 3 mass level</p> <table border="1" data-bbox="638 1619 1416 1801"> <thead> <tr> <th data-bbox="638 1619 1024 1665">Level/Element</th> <th data-bbox="1024 1619 1416 1665">cps/mg/l</th> </tr> </thead> <tbody> <tr> <td data-bbox="638 1665 1024 1711"></td> <td data-bbox="1024 1665 1416 1711"></td> </tr> <tr> <td data-bbox="638 1711 1024 1757"></td> <td data-bbox="1024 1711 1416 1757"></td> </tr> <tr> <td data-bbox="638 1757 1024 1801"></td> <td data-bbox="1024 1757 1416 1801"></td> </tr> </tbody> </table> <p>Specify IDL @ n=10, multi element, integration time -5s.</p>	Level/Element	cps/mg/l						
Level/Element	cps/mg/l									

14	Background Equivalent Concentration. (BEC)	Background equivalent concentration should be less than 1 cps (Specify)
15	Background noise ratio	5 cps or less (Specify)
16	Oxide ratio	CeO/Ce (%) - 2% or better (Specify)
17	Doubly charged ratio	Ba <sup>2+</sup> /B <sup>+</sup> - 3% or better (Specify)
18	Isotope ratio precision Ag <sup>107</sup> /Ag <sup>109</sup>	0.1% RSD or better (Specify)
19	Cell Technology	<p>System should provided with a Cell technology to remove polyatomic &amp; Isobaric Interferences.</p> <p>The system should have all the three modes of operation: Standard, collision (using inert gases such as helium) and reaction mode for trace level detection and for effective removal of interferences from complex sample matrix.</p> <p>ICPMS system prefer to have dedicated gas channels with MFC for suitable gases He, O<sub>2</sub> &amp; H<sub>2</sub>/ mixture reaction gases for trace level detection and for effective removal of interferences from complex sample matrix.</p> <p>The system should be capable of performing mass shift mode or equivalent technology and the vendor should attach appropriate application note to demonstrate the technology.</p> <p>The system should be very effective in removing unwanted polyatomic interferences formed due to free atoms.</p> <p>The gas switching time &amp; stabilization time of the collision and reaction cell from no gas to inert and/ or reaction gas is to be specified and to be demonstrated during technical evaluation.</p> <p>The Reaction cell System must work Low &amp; High Mass cut off facility to take out freshly formed poly atomic interferences.</p>
20	Dynamic range	9 <sup>th</sup> orders of magnitude or better
21	Operating modes	Optional modes (specify)
22	Detector	<p>1.The ion detector should be simultaneous discrete dynode electron multiplier, and allow element concentration calibration over a full 9 orders magnitude of dynamic range in a single scan using both analog and pulse ion counting mode.</p> <p>2.The data acquisition rate should be 2000 amu/sec or more.</p> <p>ICPMS should have high data acquisition rate to address Nano particle applications .</p>

		<p>3. Life time (specify)</p> <p>Detector supply and replacement should be included in warranty</p>
23	Standard solution traceable to NIST	<p>100 ml 1000 ppm ICP MS Standard solutions NIST traceable certified reference solutions for Al, B, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, Zn, Tl, Te, Sr, Se, K, Li, Mg, Mn, Na, Ni, Pb, As, Hg, Mo, P, Y, Ag, Au, S, Si, Sc, In, Cs, Rb, Sb, Zr, Sn, Ti, V, W, V, Pd, and Gd Multielement standard solution (wherever possible) is preferred and rest of the elements as single element standard solution.</p> <p>Required Internal standard and instrument baseline control standards</p>
24	Torch and Nebuliser	<p>Shall provide additional number (2 nos each) compatible torch and nebuliser (Specify) Mini Torch not acceptable.</p>
25	Gas Generator/Gas cylinders	<p>Suitable gas generator /cylinders with suitable regulators for each type gases</p> <p>Argon Gas cylinder – 3 Nos ( minimum)</p> <p>Helium gas cylinder- 1No</p> <p>Oxygen gas cylinder -1No</p> <p>And Ammonia / other mixture gas cylinders</p> <p>Necessary gas purification system and gas switching manifold</p>
26	Ar gas consumption (Litre/min)	<p>Specify for standard and high TDS application</p>
27	Computer platform	<p>Suitable branded computer (HP /DELL) i5/i7 processor with minimum 12 GB RAM Memory , Intel chipset, 1 TB HDD, DVD-RW, additional LAN port, 23” LED monitor with suitable original latest windows based 32/64 bit operating system, with MS Office. (with Original CD), LaserJet printer.</p>
28	Quantification software System/Software	<p><b>The Vendor should quote IQ/OQ/PQ for the ICPMS system</b></p> <p>LIMS compatibility Software for batch analysis.</p> <p>Perpetual software updates shall be provided free of charge as and when available.</p> <p>Windows-based latest version of software with perpetual license capable of controlling all aspects of Mass Spectrometer , having following features :</p> <p>software that guides users through the method and sequence development, and method templates for the rapid development of commonly used methods.</p>

		<p>On-line help with quick steps to reference entire instrument user manual</p> <p>Software must have inbuilt methods available for routine samples to enable fast turnaround time after installation and commissioning.</p> <p>The software also should have facilities for exporting data to excel or equivalent for easy processing.</p> <p>Quantitative analysis including external calibration, additions calibrations, a method of standard additions, isotope ratios and isotope dilutions and semi-quantitative analysis.</p> <p>Calibration for multi-element external calibration, a method of standard additions, and isotope ratios.</p> <p>Data reprocessing on stored data without re-running samples for changes of calibration points, internal standard points or curve fit mode.</p> <p>Editable auto-sampler rack and tube positions</p> <p>Fully automated instrument initialization (start-up) routine, including instrument stabilization time, plasma X/Y position adjustment, mass calibration, and quadrupole resolution</p> <p>Simultaneous real-time graphical display of signal as full mass scan, segments of the mass scan, and signal response vs time for multiple isotopes or ratios.</p> <p>Software should have Remote diagnostics and LAN connectivity.</p>
29	Uninterrupted Power Supply(UPS)	<p>True online UPS of suitable capacity with power factor correction and harmonic distortion (&lt; 5 % THD ; &lt; 3% Single Harmonic), Three phase input and 440V for the smooth running of ICP-MS with tubular battery (Brand- Panasonic/ Exide /Ameron) with back up of 45 min. (Brand APC/Emerson/Numeric ). <b>Quote Separately</b></p>
30	External Accessories	<p>Exhaust system with flexible metallic bellows and required accessories, drain, waste drum.</p>
31	Spares/ Consumables	<p>The system should have least maintenance components. Vendors have to give a maintenance chart for all the components that require frequent maintenance or replacement of consumables.</p> <p>Consumables for running 1500 samples should be included in the bid.</p> <p>Shall provide list of consumables and price list of consumables for run complete system with auto sampler for 5 years (7500 samples) and specify as per the <b>Annexure II</b>.</p>

		Also provide list of for complete system with auto sampler for 2 years (3000 samples) and specify as per the <b>Annexure II.</b>
32	Training	Maintenance and application training at factory site must be provided for STIC staff, free of cost. Additional onsite Application/Maintenance training should be provided after installation.
33	Nano particle and single cell detection	ICPMS should be capable for doing single particle, Nano particle and single cell detection applications. Any hardware and software required for this to be quoted optionally. Technical documents for the same also to be attached in technical bid. <b>Quote Separately</b>

## Terms and Conditions

1	Model and year of introduction of the instrument	Shall be mentioned in the tender along with original brochures /catalogue. Though the specifications given are of basic and general in nature, preference will be given for selection of latest higher-end versions. Therefore, bidders are advised to quote for different models.
2	Place of installation	At SAIF LAB of STIC, Cochin University campus
3	Warranty	(vii) 5 years comprehensive warranty from the date of completion of installation for the complete system including replacement of instrument and parts, spares, accessories and labour charges. (viii) Complete set of spares and consumables as standby shall be provided/made available along with the equipment or from time to time during the period of warranty. (ix) The repair/servicing and periodic IPV (Instrument Performance Verification) of the equipment with traceable standards have to be carried out by the manufacturer/supplier free of cost during the entire warranty period, or extended warranty period irrespective of any number of repair / services.

		<p>(x) Definite time schedule for servicing of equipment, time required for attending break-downs, etc shall be indicated in the terms &amp; conditions for warranty and AMC.</p> <p>(xi) Shall provide good after sale service/technical support capable of attending on short notice at places where the equipment is installed. At least 2 preventive maintenance visits and unlimited breakdown calls by the service/application support engineer during the warranty period, every year.</p> <p>(xii) The manufacturer / supplier shall give a warranty certificate as per the format attached in the tender Document <b>(Annexure I)</b></p> <p>(xiii) Warranty should include ICPMS detector, quadrupole cell and RF coil.</p>
4	After sales service	<p>(v) Shall provide for annual maintenance contract / after sales service contract after the warranty period.</p> <p>(vi) The cost/rate and the terms and conditions for AMC and IPV for three years, after the warranty period (6<sup>th</sup>, 7<sup>th</sup> &amp; 8<sup>th</sup> years) have to be specified.</p> <p>(vii) The payment terms for the AMC shall be as per the Rule 159 of GFR 2005 (Govt. of India) and amendments there to.</p> <p>(viii) Definite time schedule for servicing of equipment, time required for attending break-downs, etc shall be indicated in the terms &amp; conditions for AMC.</p>
5	Training of personnel	<p>(iv) Basic Application and maintenance training after installation of the equipment to our technical personnel of the concerned laboratories.</p> <p>(v) Maintenance training factory site for minimum one person should be provided free of cost.</p> <p>(vi) Trouble shooting training as and when required.</p>
6	Experience	The supplier shall have experience of at least 10 installations and operation of the equipment in India, including the model quoted.
7	Specification sheets	Detailed specification sheet(s) highlighting all the technical and other specifications must be attached <b>(Annexure III)</b> .

8	Users List	Complete list of users in India for the equipment (inclusive of the quoted model) along with certificates/testimonials from the customers shall be enclosed.
9	Instrument Performance Verification (IPV) (IQ, OQ & PQ)	To be done free of cost with traceable standards for the first 5 years (on installation, every year, after break-downs and as when repair(s) are carried out).

**(ii) Specification for Microwave Digestion System (MDS)**

**Microwave digester:** Bench-top Microwave digester with computer-controlled system for digesting samples of sediments/minerals/ore/ medical and biological samples fish and fishery products/ feed/water etc. System should have software for real time control of temperature, pressure monitoring, graphic display, automatic data storage and unlimited storage for method, record of instrument operation, etc.

***Microwave Digestion System***

<b>Sl No:</b>	<b>Particulars</b>	<b>Required Specification</b>
1	Vessel type	Solid TFM, pressure seal and screw cap. Digestion vessels should be chemical resistant, capable of handling a wide range of Acids & solvents like HNO <sub>3</sub> , HClO <sub>4</sub> , H <sub>2</sub> SO <sub>4</sub> , HF etc.
2	Vessel number	8 or more, Full set of vessels and rotors to be provided as standard along with the equipment. Additional full set (8 or more) of spare vessels (to be quoted separately)
3	Volume	100 mL or more
4	Pressure rating	80 Bar or more
5	Overpressure protection	Over pressure protection should be vessel ( specify )
6	Operating temp range	Ambient to 250 °C or more
7	Magnetron	1900W or above from 2 magnetrons (2 X 950W)
8	Microwave output power	1000-1500W peak output
9	Microwave power control	Unpulsed control over entire range, adjustable in 1% increments.
10	Temperature & pressure probe for reference vessel.	As per standard
11	Temperature control	Direct Temperature Control; in real-time, measures the actual sample temperature in each individual vessel. Indirect temperature control sensor should be quoted separately (If a part of standard model please mention)



12	Pressure control	Direct Pressure Control; contact-free, Indirect pressure control sensor should be quoted separately (If a part of standard model please mention)
13	Cavity and lid	Easy operable and safe lid
14	Oven Chamber	pressure-resistant heavy-duty oven chamber
15	Vessel Chamber /Vessel unit	Independent vessels with removable vessel unit/ assembly (specify)
16	Safety features	Specify the following 1. Door safety 2. Microwave radiation protection Leak/Error alarm
17	Overpressure venting	System should have Integrated Gas Containment Manifold
18	System control	Touchscreen control with real-time display of digestion conditions. Option connect with Computer(Optional) for installing external control, (if need arises) for which the rate/cost shall be quoted separately.
19	Software	Compatible to 21CFR and also latest OS. With real time graphic display
20	Additional Safety measures	High definition digital camera can be interfaced if not included in the system, quoted separately
21	I/O Ports	USB, Ethernet (RJ45)
22	Noise level	<70 dBA
23	Magnetic stirrer	Variable speed magnetic to homogenous mixing in all vessels should quoted separately
24	Warranty	5 years warranty for the complete system
25	Consumables	Full list of consumables and Consumables for minimum 2000 runs to be supplied.
26	Accessories	Tool kit, Vessel stand etc. (as applicable).
27	Training of personnel	Basic/required training (not less than two days) and trouble shooting training to be imparted to the satisfaction of laboratory officials

## Terms and Conditions

1	Model and year of introduction of the instrument	Shall be mentioned in the tender along with original brochures /catalogue. Though the specifications given are of basic and general in nature, preference will be given for selection of latest higher- end versions. Therefore, bidders are advised to quote for different models.
2	Place of installation	At SAIF LAB of STIC, Cochin University campus
3	Warranty	<p>(i) 5 years comprehensive warranty from the date of completion of installation for the complete system including replacement of instruments and parts, spares, accessories and labour charges.</p> <p>(ii) Complete set of spares and consumables as stand by shall be provided/made available along with the equipment or from time to time during the period of warranty.</p> <p>(iii) The repair/servicing and periodic IPV (Instrument Performance Verification) of the equipment with traceable standards have to be carried out by the manufacturer/supplier free of cost during the entire warranty period or extended warranty period irrespective any number of repairs / services.</p> <p>(iv)Definite time schedule for servicing of equipment, time required for attending break-downs, etc shall be indicated in the terms &amp; conditions for warranty and AMC.</p> <p>(v) Shall provide good after sale service/technical support capable of attending on short notice at places where the equipment are installed. At least 2 preventive maintenance visits and unlimited breakdown calls by the service/application support engineer during the warranty period, every year.</p> <p>(vi)The manufacture / supplier shall give a warranty certificate as per the format attached in the tender Document (Annex I).</p>

4	After sales service	<p>(i) Shall provide for annual maintenance contract / after sales service contract after the warranty period.</p> <p>(ii) The cost/rate and the terms and conditions for AMC and IPV for three years, after the warranty period have to be specified.</p> <p>(iii) The payment terms for the AMC shall be as per the Rule 159 of GFR 2005(Govt. of India) and amendments there to.</p> <p>(iv) Definite time schedule for servicing of equipment, time required for attending break-downs, etc shall be indicated in the terms &amp; conditions for AMC.</p>
5	Training of personnel	Basic/required training (not less than two days) and trouble shooting training to be imparted to the satisfaction of laboratory officials
6	Experience	The supplier shall have experience of at least 20 installations and
		operation of the equipment in India, including the model quoted.
7	Specification sheets	Detailed specification sheet(s) highlighting all the technical and other specifications must be attached (Annex III).
8	Users List	Complete list of users in India for the equipment (inclusive of the quoted model) along with certificates/testimonials from the customers shall be enclosed.
9	Instrument Performance Verification (IPV) (IQ, OQ & PQ)	As per the specified standards applicable with documents
10	Installation Check out specification.	Shall be provided by the supplier.

### **(iii) Specification for Ion Chromatography System**

Ion Chromatography system for analysis of Cations, Cation exchanger, Anions, like chromium, speciation of arsenic (arsenite and arsenate), selenium and mercury when coupled with ICP-MS system. The flow paths should be of PEEK material and inert withstanding the entire pH range. The system should be PC based with data acquisition and system control through the same software. The software should be able to identify various components like pump, column automatically. The system should have the components with following technical specifications.

#### **Pumps :**

- 1) One number of high pressure pump of serial dual piston type with selectable 0.001 to 15mL / min flow rate with a flow reproducibility of  $\pm 0.1\%$ . Should be able to upgrade and run a compositional ternary gradient set up.

Pump should have the following specifications :

- Serial dual pistons with two inert check valves
- Resolution of flow rate : 0.001mL
- Pulsation : Lower than 1%
- Pressure range : 0 – 5000 PSI

#### **Column Housing :**

Housing should be able to identify the columns and set the optimal operating conditions for column operations.

#### **IC Columns :**

Rugged separation column for routine analysis

Columns for Anions like Cr, As, Se, Hg, Fe etc

Columns for Cations like F, Cl, NO<sub>2</sub>, NO<sub>3</sub>, PO<sub>4</sub>, SO<sub>4</sub>, , Br, BrO<sub>3</sub>,etc.

Suitable for the separation of monovalent and divalent cations as well as for amines

Columns must suitable for interface using ICPMS

**IC columns for analyses for the listed above should be quoted with respective guard columns. The columns should have electronic chip to store data and history of column use. It should also be possible to record the number of injections and the working hours.**

To increase the useful lifespan of the separation column, include pre-column cartridge and the pulsation dampener

**Injector:**

Dual position 6-Port injector valve 2 position Rheodyne injection valve with fast response time and controlled through software.

**Data Work station :**

Software for data acquisition & processing system along with complete system control should be offered. The necessary software should be fully Windows based. The software should be able to control the system.

**Others :**

- (i) No gas should be used for complete operation of the system

**Accessories: Conductivity Detector with dynamic working range:**

- 1) One number of conductivity detector for analysis of anion and cation, should be microprocessor based with a Thermostated micro-flow cell conductivity block with an accuracy of  $\leq 0.001^{\circ}$  C. The user should be able to set temperature of the conductivity block between 20 – 50 C.
- 2) Conductivity measurement range: 0 – 15000  $\mu$ S/ cm.
- 3) Electronic noise < 0.1nS/cm at 1uS/cm level
- 4) Temperature coefficient range 0-5%
- 5) Resolution : 4pS or better

- 6) Column for cations, anions, transition metals and amines should be provided along with the detector

**Software**

Windows new version-based Chromatography Software for system control and data processing.

**Required accessories , spears and consumable for interface IC with ICP MS and Operating IC independently must be quoted.**

**Standards and buffer** solution / reagents must be provided along with instrument

**IC- ICPMS interface**

ICPMS with IC connector kit and suitable accessories and software.

## TERMS & CONDITIONS

1	Model and year of introduction of the instrument	Shall be mentioned in the tender along with original brochures /catalogue. Though the specifications given are of basic and general in nature, preference will be given for selection of latest higher- end versions. Therefore, bidders are advised to quote for different models.
2	Place of installation	At SAIF LAB of STIC, Cochin University campus
3	Warranty	<p>(i) 5 years comprehensive warranty from the date of completion of installation for the complete system including replacement of instruments and parts, spares, accessories and labour charges.</p> <p>(ii) Complete set of spares and consumables as stand by shall be provided/made available along with the equipment or from time to time during the period of warranty.</p> <p>(iii) The repair/servicing and periodic IPV (Instrument Performance Verification) of the equipment with traceable standards have to be carried out by the manufacturer/supplier free of cost during the entire warranty period or extended warranty period irrespective any number of repairs / services.</p> <p>(iv)Definite time schedule for servicing of equipment, time required for attending break-downs, etc shall be indicated in the terms &amp; conditions for warranty and AMC.</p> <p>(v) Shall provide good after sale service/technical support capable of attending on short notice at places where the equipment are installed. At least 2 preventive maintenance visits and unlimited breakdown calls by the service/application support engineer during the warranty period, every year.</p> <p>(vi)The manufacture / supplier shall give a warranty certificate as per the format attached in the tender Document (Annex I).</p>

4	After sales service	<p>(i) Shall provide for annual maintenance contract / after sales service contract after the warranty period.</p> <p>(ii) The cost/rate and the terms and conditions for AMC and IPV for three years, after the warranty period have to be specified.</p> <p>(iii) The payment terms for the AMC shall be as per the Rule 159 of GFR 2005(Govt. of India) and amendments there to.</p> <p>(iv) Definite time schedule for servicing of equipment, time required for attending break-downs, etc shall be indicated in the terms &amp; conditions for AMC.</p>
5	Training of personnel	Basic/required training (not less than two days) and trouble shooting training to be imparted to the satisfaction of laboratory officials
6	Experience	The supplier shall have experience of at least 20 installations and operation of the equipment in India, including the model quoted.
7	Specification sheets	Detailed specification sheet(s) highlighting all the technical and other specifications must be attached (Annex III).
8	Users List	Complete list of users in India for the equipment (inclusive of the quoted model) along with certificates/testimonials from the customers shall be enclosed.
9	Instrument Performance Verification (IPV) (IQ, OQ & PQ)	As per the specified standards applicable with documents
10	Installation Check out specification.	Shall be provided by the supplier.



**WARRANTY CERTIFICATE**

We Warrant that all the machines, equipments and accessories supplied by us under the Purchase Order bearing No. \_\_\_\_\_ Dated \_\_\_\_\_ , shall be brand new, free from all defects - patent or latent and faults in materials, workmanship and manufacture and shall be of the highest grade and quality and consistent with the established and generally accepted standards for material of the type ordered and shall be in full conformity with the specifications, drawing or samples and shall operate properly. We shall be fully responsible for its efficient performance. This Warranty shall survive irrespective of any payment or acceptance of the goods but shall expire after (except in respect of complaints and all manufacturing defects of which we have been notified prior to such date) five years after the installation and acceptance of equipments by STIC

The obligations under the Warranty expressed above shall include all costs relating to labour, spares, maintenance (preventive and unscheduled/breakdown service) and transport charges from site to the manufacturers work place and back and free repair/adjustment or replacement at site or any parts of the equipment which under normal and proper use and maintenance proves defective in design, material or workmanship or fails to conform to the specifications previously given by the STIC to us. This Warranty shall bind us, our assigns and successors.

Date :

Signature of Bidder

Name & Designation

Seal

**List of Spares/ consumables required for**  
**5 years for 7500 samples / 2 years for 3000 samples**

Sl No	Item	Periodicity of replacement	Quantity required	Unit price in Rs
<b>Total Price</b>				

Date :

Signature of Bidder

Name & Designation

Seal

**ANNEXURE III**

**Format of Technical Compliance of Specifications**

**Name of Equipment:.....**

Sl. No	Details of Specifications/ Parts/ Accessories of Tender Enquiry	Specifications of Quoted Model/ Part/ Accessory	Compliance Yes / No	Deviation, if any to be indicated in unambiguous terms (The compliance / Deviation should be supported by relevant Technical Literature)	Technical Justification for the Deviation, if any. If specification is superior / inferior than asked for in the enquiry, it should be clearly indicated in the justification
1	Specifications for instrument				

Date :

Signature of Bidder  
Name & Designation

Seal

- Bidder may offer any number of models (Though the specifications given are of basic and general in nature, preference will be given for selection of higher- end versions. Therefore, bidders are advised to quote for different models), of the equipment. In such cases, the Technical Compliance statement must be enclosed for each and every model separately.
- If the Bidder fails to enclose the compliance statement, the bid is likely to be rejected.

**SECTION VI : BID FORM AND PRICE SCHEDULE**



**SECTION VII : FORM FOR DETAILS ABOUT THE TENDERER**

## FORM FOR DETAILS ABOUT THE TENDERER

(To be submitted with the Tender)

1. Tender Reference No :
2. Item No. :
3. Name of the Stores/Goods/Equipment :
4. Name of the Indian/Foreign Manufacturers :  
or their authorized distributors, dealers or Indian Agent
5. Registered Office Address :
6. Address for Correspondence :
7. Please state whether party is Company/Firm/Agency:  
Authorized Stockist/Dealer/Indian Agent  
(In case of an Indian agent of a Foreign Supplier, please attach copies  
of agency agreement and DGSD registration)
8. Total value of Annual Turn-Over/ Sales for the last 3 Years :
9. GST/Sales Tax/Central Sales Tax Registration No :  
and Date..... and Validity upto
10. Income Tax (PAN) No. :  
G.I.R No./Circle / Ward
11. Name of the Bankers :
12. Address of the Bankers :
13. Past Performance of the firm/ Company :  
Please enclose list of Parties (Scientific and  
Technical Institutions) stating their Names and  
addresses with telephone no. and the names of same  
or similar items supplied to them during  
Last three years. Please enclose the reference letters from clients.

S. No	Type of Stores/Goods/ Equipment	Name of the client	Value of the Purchase Order	Date of award of Purchase Order	Date of completion
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14. Financial Soundness :  
(Please enclose copies of certified financial statements for the last three years.)
15. Technical Competence.& Work Experience in India :
16. Organisational Capability :
- No. of qualified engineers:
- Name of the key personnel & qualifications:
17. Whether any relative of Tenderer is working in STIC KOCHI. If so, give his name, designation and place of posting :
18. Details of EMD: Demand Draft/Pay Order No..... Dt.....  
Amount Rs.....of.....(Name of Bank and Branch) Payable at ..... (Name of City)  
Bank Guarantee No..... Dt.....  
FDR No.....Dt.....
19. Whether the extra terms quoted and the prices : Yes / No are open to negotiations.

“I/We have fully understood the foregoing general terms & conditions of Tender as well as the Special terms & conditions of Tender given in the Tender Document and having accepted the same in toto and I/We have made my / our offer keeping in view those terms and conditions. I/We fully agree that once I / We have endorsed in whatsoever and whichever way my/our signatures herein below all conditions whatsoever way mentioned by me / us which may not be acceptable to you / your principals shall be deemed to be withdrawn by me / us and am / are fully aware that no grievances whatsoever shall be entertained by you if our tender / quotation is not accepted / finalized”

Place  
Date

Office Seal / Stamp

Name. Designation and  
Signature of the Authorised  
Signatory



**SECTION VIII: GUARANTEE BOND FOR PERFORMANCE SECURITY  
DEPOSIT**

**GUARANTEE BOND FOR PERFORMANCE SECURITY DEPOSIT**

**(ON STAMP PAPER WORTH Rs.100/-\*)**

Date :

Tender Reference No.:

Item No.:

Name of Stores/Goods/Equipment:

**The Director  
Sophisticated Test and Instrumentation Centre,  
Cochin University P.O  
Kochi Ernakulam District Kerala 682022**

Gentlemen:

Having examined the Bidding Documents including Addenda Nos. \_\_\_\_\_  
(*insert numbers, if any*), the receipt of which is hereby duly acknowledged, we, the undersigned, offer to supply and deliver

\_\_\_\_\_ (*brief description of Goods and Services*) in conformity with the said bidding documents for the same for the price quoted in the Commercial Bid or such other sums as may be ascertained in accordance with the Schedule of Prices attached with the Commercial Bid and made part of this bid.

We undertake, if our bid is accepted, to deliver the goods in accordance with the delivery schedule specified in the Technical Specifications of the Tender Document.

If our bid is accepted, we will submit the performance security deposit as directed in IBIB Clause 26 of the Tender Document for the due performance of the Contract, in the form prescribed by STIC KOCHI.

We agree to abide by this bid for a period of 90 (ninety only) days after the date fixed for bid opening under IBIB Clause 18 of the Tender Document and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Until a formal contract is prepared and executed, this bid, together with your written acceptance thereof and your notification of award shall constitute a binding Contract between us.

Commissions or gratuities, if any, paid or to be paid by us to agents relating to this Bid, and to contract execution if we are awarded the contract, are listed below:

Amount : \_\_\_\_\_ Rupees: \_\_\_\_\_

Name :

---

Address :

---

Purpose of Commission or gratuity :

---

( if none, state “none”)

We understand that you are not bound to accept the lowest or any bid you may receive.

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 2018.

---

Signature

---

(in the capacity of)

Duly authorized to sign Bid for and on behalf of

---

Note (\*) – In case of a Foreign Supplier with no Indian agent, the Guarantee Bond can be given on the letterhead of the Supplier after notarizing it.

**SECTION IX: MANUFACTURERS' AUTHORIZATION FORM**

**MANUFACTURERS' AUTHORIZATION FORM**

No. \_\_\_\_\_ dated \_\_\_\_\_

**To :**

**The Director  
Sophisticated Test and Instrumentation Centre,  
Cochin University P.O  
Kochi Ernakulam District Kerala 682022**

Tender Reference No. :

Item No. :

Name of Stores/Goods/Equipment :

Dear Sir,

We \_\_\_\_\_ who are established and reputed  
manufacturers of \_\_\_\_\_ having  
factories at \_\_\_\_\_ (address  
of factory) do hereby authorize M/s.  
\_\_\_\_\_

\_\_\_\_\_ (Name and address of  
Agent) to submit a bid, and sign the contract with you against the IBIB of the Tender  
Document.

We hereby extend our full guarantee and warranty as per Clause 15 of the General Terms  
and Conditions and Clause 2.21.3 of the Special Terms and Conditions of the Tender  
Document for the goods and services offered by the above firm against this tender. Yours  
faithfully,

(Name)

(Name of manufacturers)

Note: This letter of authority should be on the letterhead of the manufacturer and should  
be signed by a person competent and having the power of attorney to bind the  
manufacturers. It should be included by the Bidder in its bid.

## CHECKLIST FOR BIDDERS

BIDDERS to indicate whether the following are enclosed / mentioned by striking out the non-relevant option and write concern page no.

S. No	Particulars	Documents Attached	Page No
1	Two separate bids duly filled in and signed in sealed envelopes (i) Technical (ii) Commercial	( Yes / No )	
2	The Demand Draft/BG for Rs 2,60,000/- towards Earnest Money Deposit	( Yes / No )	
3	Format of compliance statement of specifications - Annexure – III	( Yes / No )	
4	Bid Security Form – Section VIII (as applicable)	( Yes / No )	
5	Manufacturer’s Authorization Form – Section IX	( Yes / No )	
6	Previous Supply Orders	( Yes / No )	
7	Bidder Information form – Section VII	( Yes / No )	
8	A copy of the Un-priced Commercial bid	( Yes / No )	
9	Undertaking that the successful BIDDER agrees to give a 10 % security deposit and Performance Bank Guarantee	( Yes / No )	
10	Self Attested copy of GST/ Sales Tax Registration certificate (CST/VAT etc) (as applicable)	( Yes / No )	
11	Delivery Period, Warranty and Payment terms are clearly mentioned	( Yes / No )	
12	Bank charges agreed for outside India	( Yes / No )	
13	LC clause agreeable.	( Yes / No )	
14	Supply of spares for 10 years	( Yes / No )	
15	Acceptance of warranty period and Free replacements during warranty period (Annexure – I)	( Yes / No )	
16	Tender Terms & Conditions Acceptance on tender document signed with official seal is attached	( Yes / No )	