The University of Kerala, under PURSE programme, invites Tenders from reputed manufacturers/authorized distributors/ Indian Agents with sound Technical and Financial capabilities for Supply, Installation and Commissioning of:

<table>
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<tr>
<th>Sl.No</th>
<th>DESCRIPTION OF ITEM</th>
<th>BANK GUARANTEE IN INR</th>
<th>LAST DATE &amp; TIME FOR SUBMISSION OF TENDER</th>
<th>DATE &amp; TIME OF OPENING OF BID</th>
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<tbody>
<tr>
<td>1</td>
<td>XRD</td>
<td>Rs. 1,00,000/-</td>
<td>12.09.2013 up to 12.00 PM IST</td>
<td>12.09.2013 at 12.30 PM IST</td>
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<tr>
<td>2</td>
<td>AFM</td>
<td>Rs. 1,00,000/-</td>
<td>12.09.2013 up to 12.00 PM IST</td>
<td>12.09.2013 at 12.30 PM IST</td>
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1. The tenders complete in all respects should be addressed to The Co-Ordinator PURSE, Department of Botany, University of Kerala, Kariavattom Campus, Kariavattom, P.O., Trivandrum, Kerala, India. Pin. 695 581.
2. Bank Guarantee from a Nationalised / Scheduled Bank drawn in favour of The Co-Ordinator PURSE, Department of Botany, University of Kerala, payable at Kariavattom, be submitted along with the Bid. Those who have already submitted the quotations against earlier tender should also submit new quotations with revalidated bank guarantee.
3. Tender forms are not being sold separately and the same can be downloaded from our Website: www. keralauniversity.ac.in
4. Tenders received without bank guarantee will not be considered at all.
5. Tenders by Telex/Telegram/Fax/E-mail will not be accepted.
6. The Co-Ordinator PURSE, Department of Botany, University of Kerala, Kariavattom Campus, Kariavattom, P.O., Trivandrum, Kerala, India. Pin. 695 581, reserves the right to accept or reject any or all tenders without assigning any reason thereof.
7. In case of any modifications in specifications / terms and conditions/ any clarifications to the bid document, it will be hosted in our website only and bidders are requested to log on to our website from time to time and no separate corrigendum will be issued in this regard.

Date: 24 09 2013

The Co-Ordinator PURSE,
University of Kerala
**TENDER DOCUMENT FOR THE SUPPLY OF XRF AND AFM**

<table>
<thead>
<tr>
<th>Tender reference No.</th>
<th>UOK/PURSE/1 3-01/2013</th>
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<tbody>
<tr>
<td>Last date for submission of tenders</td>
<td>12.09.2013 up to 12.00 AM IST</td>
</tr>
<tr>
<td>Date of opening of bids</td>
<td>12.09.2013 at 12.30 AM IST</td>
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<tr>
<td>Address for Communication</td>
<td>The Co-Ordinator PURSE</td>
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<td>Department of Botany</td>
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<td>University of Kerala,</td>
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<td>Kariavttom. P.O., Trivandrum</td>
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<td></td>
<td>Pin 695 581</td>
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<td>KERALA, INDIA</td>
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</table>
INSTRUCTIONS TO BIDDER

A. Introduction

1. Eligibility of Bidders

1.1 This Invitation for Bids is open to all manufacturers or their dealers specifically authorised by the manufacturers to quote on their behalf for this tender as per manufacturer's authorization form and Indian agents of foreign principals, if any.

2. Cost of Bidding

2.1 The Bidder shall bear all costs associated with the preparation and submission of its bid, and “the Purchaser”, will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

B. The Bidding Documents

3. Cost of Bidding Documents

3.1 Interested eligible bidders can download the tender documents from our Website http://www.keraluniversity.ac.in free of cost. The tender document should be submitted along with a bid security of Rs.1 Lakh for each item as Bank Guarantee valid for 60 days. Those who have already submitted the quotations against earlier tender should also submit new quotations with revalidated bank guarantee.

4. Content of Bidding Documents

4.1 The goods required, bidding procedures and contract terms are prescribed in this bid document which includes the following:
(a) Notice inviting tender
(b) Instructions to Bidder;
(c) General Conditions of Contract (GCC);
(d) Special Conditions of Contract (SCC);
(e) Technical Specifications;
(f) Performance Security Form;
(g) Performance Statement form
(h) Service Support details;
(i) Bid form;
(j) Bid Security Form;
(k) Manufacturer’s Authorisation Form
(l) Qualification requirements;

The goods required, bidding procedures and contract terms are prescribed in the bidding documents which should be read in conjunction. 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.
4.2 Amendment of Bidding Documents

4.2.1 A prospective Bidder requiring any clarification of the Bidding Documents shall contact the Purchaser in writing at the Purchaser’s address specified in the Special Conditions of Contract (SCC). The Purchaser will respond in writing to any request for clarification, provided that such request is received no later than ten (5) days prior to the deadline for submission of bids. In case of any clarifications to the bid document it will be hosted in our website only and bidders are requested to log on to our website from time to time and no separate corrigendum will be issued in this regard.

4.2.2 At any time prior to the deadline for submission of bids, the Purchaser may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the bidding documents by amendment.

4.2.3 In case of any amendment to the bid document it will be hosted in our website only and bidders are requested to log on to our website from time to time and no separate corrigendum will be issued in this regard.

4.2.4 In order to allow prospective bidders reasonable time in which to take the amendment into account in preparing their bids, the Purchaser, at its discretion, may extend the deadline for the submission of bids and host the changes on the website of the purchaser.

C. Preparation of Bids

5. Language of Bid

5.1 The bid prepared by the Bidder, as well as all correspondence and documents relating to the bid and exchanged by the Bidder and the Purchaser, shall be written in English language.

6. Documents Comprising the Bid:
   (a) Bid security as specified in the Invitation to Bids.
   (b) Service support details form;
   (c) Performance Statement Form;
   (d) Documentary evidence establishing that the bidder is eligible to bid and is qualified to perform the contract if its bid is accepted.
   (e) Bid form.
   (f) Price indicated in the bid form.

7. Bid Prices

7.1 The Bidder shall indicate on the appropriate price schedule form, the unit prices and total bid prices of the goods it proposes to supply under the contract.

7.2 Prices indicated on the price-schedule form shall be entered separately in the following manner:
(a) For Goods being offered from India
(i) The price of the goods quoted ex works including taxes already paid.
(ii) VAT and other taxes like excise duty etc. which will be payable on the goods if the contract is awarded.
(iii) The charges for inland transportation, insurance and other local services required for delivering the goods at the desired destination as specified in the price schedule form.
(iv) The installation, commissioning and training charges, if any.

(b) For Goods being offered from abroad
(i) The price of the goods, quoted on FCA (named place of delivery abroad) or FOB (named port of shipment), as specified in the price schedule form.
(ii) The charges for insurance and transportation of the goods to the port/place of destination.
(iii) The agency commission etc., if any.
(iv) The installation, commissioning and training charges, if any.

7.3 The terms FOB, FCA, CIF, CIP etc shall be governed by the rules prescribed in the current edition of the terms published by the International Chambers of Commerce, Paris.

7.4 Where there is no mention of packing, forwarding, freight, insurance changes, taxes etc. such offer shall be rejected as incomplete and prices quoted by the Bidder shall be fixed during the Bidder's performance of the Contract and not subject to variation on any account.

7.5 All lots and items must be listed and priced separately in the Price Schedules. If a Price Schedule shows items listed but not priced, their prices shall be assumed to be included in the prices of other items. Lots or items not listed in the Price Schedule shall be assumed to be not included in the bid.

7.6 The purchases made by the purchaser for scientific purpose are exempt from excise duty and Custom Duty at a concessional rate is leviable.

7.7 The prices quoted by the bidder shall be fixed during the bidder’s performance of the contract and not subject to variation on any account.

8. Bid Currencies

8.1 Prices shall be quoted in Indian Rupees or in freely convertible foreign currency.

9. Documents Establishing Bidder's Eligibility and qualifications

9.1 The bidder shall furnish, as part of its bid, documents establishing the bidders' eligibility to bid and its qualification to perform the contract if its bid is accepted.

10. Documents Establishing Goods' Eligibility and Conformity to Bidding Documents

10.1 The documentary evidence of the goods and services eligibility shall consist of a statement on the country of origin of the goods and services offered which shall be confirmed by a certificate of origin at the time of shipment.

10.2 The documentary evidence of conformity of the goods and services to the bidding documents may be in the form of literature, drawings 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 a period of two years, following commencement of the use of the goods by the Purchaser; and

(c) An item-by-item commentary on the Purchaser's Technical Specifications 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.

11. **Bid Security**

11.1 The Bidder shall furnish, as part of its bid, a bid security for an amount as specified in the Invitation for Bids.

11.2 The bid security is required to protect the Purchaser against the risk of Bidder's conduct, which would warrant the security's forfeiture.

11.3 The bid security shall be in Indian Rupees and shall be in the form of bank guarantee favouring The Co-Ordinator PURSE, University of Kerala.

11.4 Any bid not secured in accordance with Clauses 11.1 and 11.3 above will be rejected by the Purchaser as non-responsive.

11.5 Unsuccessful bidder's bid security generally will be discharged/returned not later than 15 days after the expiration of the period of bid validity or placement of order which ever is later.

11.6 The successful Bidder's bid security will be discharged upon the Bidder furnishing the performance security. The Bid security should be kept valid until then.

11.7 The bid security may be forfeited:

(a) If a Bidder withdraws, modifies, revises, deviates, its bid during the period of bid validity specified by the Bidder on the Bid Form; or

(b) In case of a successful Bidder, if the Bidder fails to furnish order acceptance within **15 days** the order and/or fails to furnish Performance Security.

12. **Period of Validity of Bids**

12.1 Bids shall remain valid for **60 days** after the date of bid opening prescribed by the Purchaser. A bid valid for a shorter period may be rejected by the Purchaser as non-responsive.

12.2 In exceptional circumstances, the Purchaser may solicit the Bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing (or by cable, telex, fax or e mail). The bid security provided under Clause 11 shall also be suitably extended. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request will not be required nor permitted to modify its bid.

12.3 Bid evaluation will be based on the bid prices without taking into consideration the above corrections.
13. **Format and Signing of Bid**

13.2 The original and all copies of the bid 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. All pages of the bid, except for unamended printed literature, shall be initiated by the person or persons signing the bid.

13.3 Any interlineations, erasures or overwriting shall be valid only if the person or persons signing the bid initial them.

13.4 The Bidder shall furnish information on commissions or gratuities, if any paid or to be paid to agents relating to this Bid, and to contract execution if the Bidder is awarded the contract as per the bid form.

**D. Submission of Bids**

14. **Sealing and Marking of Bids**

14.1 The bidder shall seal the bid in an envelope.

(a) Be addressed to the Purchaser at the following address:

The Co-Ordinator PURSE, Department of Botany, University of Kerala, Kariavattom Campus, Kariavattom, P.O., Trivandrum, Kerala, India. Pin. 695 581.

(b) Bear the Tender No., due date and a superscribed "Do not open before 12.00 hrs (IST) on 12.09.2013"

14.3 If the envelope is not sealed and marked as required Clause 14.2, the Purchaser will assume no responsibility for the bid's misplacement or premature opening.

14.4 Telex, Cable, Fax or e-mail bids will be rejected.

15. **Deadline for Submission of Bids**

15.1 Bids must be received by the Purchaser at the address specified under Clause 14.2 no later than the time and date specified in the Invitation for Bids. In the event of the specified date for the submission of Bids being declared a holiday for the Purchaser, the Bids will be received up to the appointed time on the next working day.

15.2 The Purchaser may, at its discretion, extend this deadline for submission of bids by amending the bid documents in accordance with Clause 4, in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

16. **Late Bids**

16.1 Any bid received by the Purchaser after the deadline for submission of bids prescribed by the Purchaser, pursuant to Clause 15, will be rejected and/or returned to the Bidder.
17. **Modification and Withdrawal of Bids (Prior to deadline only)**

17.1 The Bidder may modify or withdraw its bid after the bid's submission; provided that written notice of the modification or withdrawal is received by the Purchaser prior to the deadline prescribed for submission of bids.

17.2 The Bidder's modification or withdrawal notice shall be prepared, sealed, marked and dispatched in accordance with the provisions of Clause 14. A withdrawal notice may also be sent by telex or cable or fax or e mail but followed by a signed confirmation copy, post marked not later than the deadline for submission of bids.

17.3 No bid may be modified subsequent to the deadline for submission of bids.

17.4 No bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the bid form. Withdrawal of a bid during this interval may result in the Bidder's forfeiture of its bid security, pursuant to Clause 11.7.

**E. Opening and Evaluation of Bids**

18. **Opening of Bids by the Purchaser**

18.1 The Purchaser will open all bids, in the presence of Bidders' representatives who choose to attend, as per the schedule given in invitation to bids. The Bidders' representatives who are present shall sign the quotation opening sheet evidencing their attendance. In the event of the specified date of Bid opening being declared a holiday for the Purchaser, the Bids shall be opened at the appointed time and location on the next working day.

18.2 The bidders' names, bid modifications or withdrawals, specifications, and the presence or absence of requisite bid security and such other details as the Purchaser, at its discretion, may consider appropriate, will be announced at the opening. No bid shall be rejected at bid opening, except for late bid.

18.3 Bids (and modifications sent pursuant to Clause 17.2) that are not opened and read out at bid opening shall not be considered further for evaluation, irrespective of the circumstances.

19. **Clarification of Bids**

19.1 During evaluation of bids, the Purchaser may, at its discretion, ask the Bidder for a clarification of its bid. The request for 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 negotiation shall be held except with the lowest bidder.

20. **Preliminary Examination**

20.1 The Purchaser will examine the bids to determine whether they are complete, whether required sureties have been furnished, whether the documents have been properly signed, and whether the bids are generally in order. Bids from suppliers, without proper Authorization from the manufacturers and from Indian agents without DGS&D Registration Certificate in case the items fall under the restricted list of the current EXIM policy shall be treated as non-responsive and rejected.

20.2 Arithmetical errors in the priced bids 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 a discrepancy between the price quoted in words and figures, whichever is the higher of the two shall be taken as the bid price.

20.3 The Purchaser may waive any minor informality, non-conformity, or irregularity 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.

20.4 Prior to the detailed evaluation, the Purchaser will determine the substantial responsiveness of each bid to the bidding documents. For purposes of these Clauses, a substantially responsive bid is one, which conforms to all the terms and conditions of the bidding documents without material deviations. Deviations from or objections or reservations to critical provisions such as those concerning Bid Security/ Performance Security, Warranty, Force Majeure, Applicable law and Taxes & Duties, etc., will be deemed to be a material deviation.

20.5 If a bid is not substantially responsive, it will be rejected by the Purchaser and may not subsequently be made responsive by the Bidder by correction of the non-conformity.


21.1 To facilitate evaluation and comparison, the Purchaser will convert all bid prices expressed in the amounts in various currencies in which the bid prices are payable to Indian Rupees at the selling exchange rate established by any bank in India as notified in the Newspapers on the date of bid opening.

22. Evaluation & comparison of bids

For the bids surviving the technical evaluation which have been found to be responsive the evaluation & comparison shall be made as under

22.1 For indigenous offers.

The final landing cost of purchase after all discounts, freight, forwarding, insurance, taxes etc. shall be the basis of evaluation.

22.2 For imported offers.

The FOB price shall be the basis of evaluation.

Note: Where there is no mention of packing, forwarding, freight, insurance charges, taxes etc. such offers shall be rejected as incomplete.

23. Contacting the Purchaser

23.1 Subject to Clause 19, no Bidder shall contact the Purchaser on any matter relating to its bid, from the time of the bid opening to the time the Contract is awarded. If the bidder wishes to bring additional information to the notice of the purchaser, it should do so in writing.

23.2 Any effort by a Bidder to influence the Purchaser in its decisions on bid evaluation, bid comparison or contract award may result in rejection of the Bidder's bid.
24. Post qualification

24.1 In the absence of pre-qualification, the Purchaser will determine to its satisfaction whether the Bidder that is selected as having submitted the technically competent and lowest evaluated responsive bid is qualified to perform the contract satisfactorily, in accordance with the criteria listed in ITB Clause 9.

24.2 The determination will take into account the Bidder’s financial, technical and production capabilities. It will be based upon an examination of the documentary evidence of the Bidder’s qualifications submitted by the Bidder, pursuance to ITB Clause 9, as well as such other information as the Purchaser deems necessary and appropriate.

24.3 An affirmative determination will be a prerequisite for award of the contract to the Bidder. A negative determination will result in rejection of the Bidder's bid.

25. Award Criteria

25.1 Subject to ITB Clause 27, the Purchaser will award the contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined to be meeting all the specifications necessary to perform the analyses at required accuracy and to be the lowest evaluated bid, provided further that the Bidder is determined to be qualified to perform the contract satisfactorily.

26. Purchaser's right to vary Quantities at the Time of Award

26.1 The Purchaser reserves the right at the time of Contract award to increase or decrease the quantity of goods and services originally specified in the Schedule of Requirements without any change in unit price or other terms and conditions.

27. Purchaser's right to accept Any Bid and to reject any or All Bids

27.1 The Purchaser 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 Contract, 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 the Purchaser's action.

28. Notification of Award

28.1 Prior to the expiration of the period of bid validity, the Purchaser will notify the successful bidder in writing by registered letter or by cable or telex or fax or e mail that the bid has been accepted by way of a Purchase Order.

28.2 Upon the successful Bidder's furnishing of performance security pursuant to Clause 29, the Purchaser will generally notify each unsuccessful Bidder and will discharge its bid security, pursuant to Clause 11.
29. **Performance Security**

29.1 Within 15 days of the receipt of notification of award/purchase order from the Purchaser, the successful Bidder shall furnish the performance security, in the Performance Security Form provided in the bidding documents.

29.2 Failure of the successful bidder to accept the order shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security and call for new bids.

30. **Order Acceptance**

   The successful bidder should submit Order acceptance of the Purchase Order within 15 days from the date of issue, failing which it shall be presumed that the vendor is not interested and his bid security is liable to be forfeited pursuant to clause 11. 7 of ITB.

*******
GENERAL CONDITIONS OF CONTRACT

1. Definitions

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

a. “The Order” means the Purchase Order placed by the Purchaser including all the attachments and appendices thereto and all documents incorporated by reference therein and all amendments of the purchase order.

b. “The Contract Price” means the price payable to the Supplier under the order for the full and proper performance of its contractual obligations;

c. “The Goods” means all the equipment, machinery, and/or other materials, which the Supplier is required to supply to the Purchaser under the Contract;

d. “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;

e. “GCC” means the General Conditions of Contract contained in this section.

f. “SCC” means the Special Conditions of Contract.

g. “The Purchaser” as specified in Special Conditions of Contract.

h. “The Purchaser's country” is “India”.

i. “The Supplier” means the individual or firm supplying the Goods and Services under this Contract.

j. “Day” means calendar day.

2. Application

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

3. Standards

3.1 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.

4. Use of Contract Documents and Information

4.1 The Supplier shall not, without the Purchaser's prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the Purchaser in connection therewith, to any person other than a person employed by the Supplier in
performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far, as may be necessary for purposes of such performance.

4.2 The Supplier shall not, without the Purchaser's prior written consent, make use of any document or information enumerated in GCC Clause 4.1 except for purposes of performing the Contract.

4.3 Any document, other than the Contract itself, enumerated in GCC Clause 4.1 shall remain the property of the Purchaser and shall be returned (in all copies) to the Purchaser on completion of the Supplier's performance under the Contract if so required by the Purchaser.

5. **Patent Rights**

5.1 The Supplier shall indemnify the Purchaser against all third-party claims of infringement of patent, trademark or industrial design rights arising from use of the Goods or any part thereof in India.

6. **Submission of the bids.**

6.1 All bids complete in every respect must reach this office within the last date and time of receipt of bid. No extension shall be allowed for any reason what so ever. Late tenders, Tenders received without Bid security/Earnest Money, cost of bidding documents, if applicable etc. shall be rejected.

6.2 Tender documents are available for sale at the office specified in Invitation for bids. Interested bidders may purchase the tender documents on payment of the cost thereof or download directly from our website, as indicated in invitation for bids. The Purchaser is not liable for either non-receipt of the tender document or for late receipt of the tender documents.

7. **Performance Security**

7.1 Within 15 days of receipt of the notification of contract award/purchase order, the Supplier shall furnish performance security in the amount specified in SCC.

7.2 The proceeds of the performance security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.

7.3 The Performance Security shall be a bank guarantee in favour of the purchaser.

7.4 The performance security will be discharged by the Purchaser and returned to the Supplier not later than 60 days following the date of completion of the Supplier's performance obligations, including any warranty obligations, unless specified otherwise in SCC.

7.5 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, rendering the same valid for the duration of the contract, as amended for further period of 60 days thereafter.
8. Inspections and Tests

8.1 The Purchaser or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract specifications at no extra cost to the Purchaser. SCC and the Technical Specifications shall specify what inspections and tests if any, the Purchaser requires and where they are to be conducted. The Purchaser shall notify the Supplier in writing in a timely manner of the identity of any representatives retained for these purposes.

8.2 The inspections and tests may be conducted at the point of delivery and/or at the Goods final destination.

8.3 Should any inspected or tested Goods fail to conform to the specifications, the Purchaser 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 the Purchaser.

8.4 The Purchaser's right to inspect test and, where necessary, reject the Goods after the Goods' arrival at Site shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by the Purchaser or its representative prior to the Goods shipment.

8.5 Nothing in GCC Clause 8 shall in any way release the Supplier from any warranty or other obligations under this Contract.

9. Packing

9.1 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, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.

9.2 The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as shall be provided for in the Contract including additional requirements, if any, specified in SCC and in any subsequent instructions ordered by the Purchaser.

10. Delivery and Documents

10.1 Delivery of the Goods shall be made by the Supplier in accordance with the terms specified by the Purchaser in the order within the period as indicated in the SCC. The details of shipping and/or other documents to be furnished by the supplier are specified in SCC.

11. Insurance

11.1 The Goods supplied under the Contract shall be fully insured in Indian Rupees against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in SCC.
12. Transportation

12.1 Where the Supplier is required under the Contract to transport the Goods to a specified place of destination within India defined as Project site, transport to such place of destination in India including insurance, as shall be specified in the Contract, shall be arranged by the Supplier, and the related cost shall be included in the Contract Price.

13. Incidental Services

13.1 The Supplier may be required to provide any or all of the following services, including additional services, specified in SCC, if any:

a) Performance or supervision of the on-site assembly and/or start-up of the supplied Goods;

b) Furnishing of tools required for assembly and/or maintenance of the supplied Goods;

c) Furnishing of detailed operations and maintenance manual for each appropriate unit of supplied Goods;

d) Performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and

e) Training if any, of the Purchaser's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance and/or repair of the supplied Goods.

14. Spare Parts

14.1 As specified in the SCC, 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:

a) Such spare parts as the Purchaser may elect to purchase from the Supplier, providing that this election shall not relieve the Supplier of any warranty obligations under the Contract; and

b) In the event of termination of production of the spare parts:

c) Advance notification to the Purchaser of the pending termination, in sufficient time to permit the Purchaser to procure needed requirements; and

d) Following such termination, furnishing at no cost to the Purchaser, the blueprints, drawings and specifications of the spare parts, if requested.

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 that 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 the Purchaser'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. The warranty should be comprehensive on site, repair/replacement.

15.2 This warranty shall remain valid for 36 months or as per the period mentioned in the specifications, whichever is higher, after the Goods or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the Contract, unless specified otherwise in the SCC.

15.3 The Purchaser shall promptly notify the Supplier in writing of any claims arising under this warranty.

Upon receipt of such notice, the Supplier shall immediately arrange for a standby item and within 03 days 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 the Purchaser for the replaced parts/goods thereafter.

The period for correction of defects in the warranty period is 03 days.

If the supplier having been notified, fails to remedy the defects within 03 days, the purchaser may proceed to take such remedial action as may be necessary, at the supplier's risk and expenses and without prejudice to any other rights, which the purchaser may have against the supplier under the contract.

15.4 This warranty shall remain valid even in the case of later shifting and reinstallation of the system, during the warranty period, from the place of initial installation, provided that such reinstallation is carried out by the supplier on request of the purchaser.

16. Payment

16.1 The method and conditions of payment to be made to the Supplier under this Contract shall be as specified in the SCC.

16.2 The Supplier's request(s) for payment shall be made to the Purchaser in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and the Services performed, and by documents, submitted pursuant to GCC Clause 10, and upon fulfilment of other obligations stipulated in the contract.

16.3 Payments shall be made promptly by the Purchaser but in no case later than sixty (60) days after acceptance of item and submission of the invoice or claim by the Supplier.

16.4 Payment shall be made in currency as indicated in the order.

17. Prices

17.1 Prices charged by the Supplier for Goods delivered and Services performed under the Contract shall not vary from the prices quoted by the Supplier in its bid.

18. Change Orders

18.1 The Purchaser may at any time, by written order given to the Supplier pursuant to GCC Clause 31, make changes within the general scope of the Contract in any one or more of the following:
(a) Drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser;
(b) The method of shipping or packing;
(c) The place of delivery; and/or
(d) The Services to be provided by the Supplier.
(e) The delivery schedule.

18.2 If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or delivery schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this clause must be asserted within fifteen (15) days from the date of the Supplier's receipt of the Purchaser's change order.

19. Contract Amendments

19.1 Subject to GCC Clause 18, no variation in or modification of the terms of the Contract shall be made except by written amendment.

20. Assignment

20.1 The Supplier shall not assign, in whole or in part, its obligations to perform under the Contract, except with the Purchaser's prior written consent.

21. Subcontracts

21.1 The Supplier shall notify the Purchaser in writing of all subcontracts awarded under this Contract if not already specified in the bid. Such notification, in his original bid or later, shall not relieve the Supplier from any liability or obligation under the Contract.

21.2 Sub-contract shall be only for bought-out items and sub-assemblies.

22. Delays in the Supplier's Performance

22.1 Delivery of the Goods and performance of the Services shall be made by the Supplier in accordance with the time schedule specified by the Purchaser.

22.2 If at any time during performance of the Contract, the Supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the Goods and performance of Services, the Supplier shall promptly notify the Purchaser in writing of the fact of the delay, its likely duration and its cause(s).

22.3 As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may, at its discretion, extend the Supplier’s time for performance with or without penalty, in which case the extension shall be ratified by the parties by amendment of the Contract.

22.4 Except as provided under GCC Clause 25, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of penalty pursuant to GCC Clause 23, unless an extension of time is agreed upon pursuant to GCC Clause 22.2 without the application of penalty clause.
23. **Penalty clause**

23.1 Subject to GCC Clause 25, 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, the Purchaser 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 SCC 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 a maximum deduction of the Percentage specified in SCC. Once the maximum is reached, the Purchaser may consider termination of the Contract pursuant to GCC Clause 24.

24. **Termination for Default**

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

   a) If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the order, or within any extension thereof granted by the Purchaser pursuant to GCC Clause 22; or

   b) If the Supplier fails to perform any other obligation(s) under the Contract.

   c) If the Supplier, in the judgment of the Purchaser has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

24.2 In the event the Purchaser terminates the Contract in whole or in part, pursuant to GCC Clause 24.1, the Purchaser may procure, upon such terms and in such manner, as it deems appropriate, Goods or Services similar to those undelivered, and the Supplier shall be liable to the Purchaser for any excess costs for such similar Goods or Services. However, the Supplier shall continue the performance of the Contract to the extent not terminated.

25. **Force Majeure**

25.1 Notwithstanding the provisions of GCC Clauses 22, 23, 24 the Supplier shall not be liable for forfeiture of its performance security, liquidated damages 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.

25.2 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.

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

26.1 The Purchaser may at any time terminate the Contract by giving written notice to the Supplier, if the Supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy, which has accrued or will accrue thereafter to the Purchaser.

27. **Resolution of Disputes**

27.1 The Purchaser and the Supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.

27.2 If, after thirty (30) days from the commencement of such informal negotiations, the Purchaser and the Supplier have been unable to resolve amicably a Contract dispute, either party may require that the dispute be referred for resolution to the formal mechanisms specified in the SCC. These mechanisms may include, but are not limited to, conciliation mediated by a third party, adjudication in an agreed National or international forum and national or international arbitration.

28. **Governing Language**

28.1 The contract shall be written in **English language**. Subject to GCC Clause 30, English language version of the Contract shall govern its interpretation. All correspondence and other documents pertaining to the Contract, which are exchanged by the parties, shall be written in the same language.

29. **Applicable Law**

29.1 The Contract shall be interpreted in accordance with the laws of the Union of India and all disputes shall be subject to place of jurisdiction as specified in SCC.

30. **Notices**

30.1 Any notice given by one party to the other pursuant to this contract/order shall be sent to the other party in writing or by cable, telex, FAX or e-mail and confirmed in writing to the other party’s address specified in the SCC.

30.2 A notice shall be effective when delivered or on the notice’s effective date, which ever is later.

31. **Taxes and Duties**

31.1 Suppliers shall be entirely responsible for all taxes, duties, license fees, octroi, road permits, etc., incurred until delivery of the contracted Goods to the Purchaser. However, Sales tax in respect of the transaction between the Purchaser and the Supplier shall be payable extra, if so stipulated in the order.

31.2 In addition to the above terms, all terms of supply of CSIR existing and issued from time to time is applicable to this tender without prejudice to other terms.
31.3 Being the purchases for scientific purpose, the customs/Excise duty exemptions are applicable

31.4 Suppliers shall be entirely responsible for all taxes and customs duties for the parts/components/spares/whole equipment supplied as repair/replacement during the entire period of warranty.

32. Disqualification of Tenders

32.1 Tenders are liable for rejection if they do not in line with the terms and conditions of this tender notice.

32.2 Conditional quotations will not be considered.

*******
SPECIAL CONDITIONS OF CONTRACT

The following Special Conditions of Contract shall supplement the General Conditions of Contract. Whenever there is a conflict, the provisions herein shall prevail over those in the General Conditions of Contract. The corresponding clause number of the General Conditions is indicated in parentheses.

1. **Definitions (GCC Clause 1)** (a) The Purchaser is The Co-ordinator PURSE, University of Kerala.

2. **Performance Security (GCC Clause 7)** Substitute clause 7.1 of the GCC by the following:

   2.1 Within 15 days after the Supplier’s receipt of order, the Supplier shall furnish Performance Security to the Purchaser for an amount of 10% of the contract value, valid up to 60 days after the date of completion of performance obligations including warranty obligations.

3. **Inspection and tests**

   Inspection and tests prior to shipment of Goods and at final acceptance are as follows:

   3.1 The acceptance test will be conducted by the Purchaser, their consultant or other such person nominated by the Purchaser at its option after the equipment is installed at purchaser’s site in the presence of supplier’s representatives. The acceptance will involve trouble free operation. There shall not be any additional charges for carrying out acceptance test. No malfunction, partial or complete failure of any part of the equipment is expected to occur. The Supplier shall maintain necessary log in respect of the result of the test to establish to the entire satisfaction of the Purchaser, the successful completion of the test specified.

   3.2 In the event of the ordered item failing to pass the acceptance test, a period not exceeding one week will be given to rectify the defects and clear the acceptance test, failing which the Purchaser reserve the right to get the equipment replaced by the Supplier at no extra cost to the Purchaser.

   3.3 Successful conduct and conclusion of the acceptance test for the installed goods and equipments shall also be the responsibility and at the cost of the Supplier.

   3.4 Manuals and drawings before the goods and equipments are taken over by the Purchaser, the Supplier shall supply operation and maintenance manuals together with drawings of the goods and equipments built. These shall be in such details as will enable the Purchaser to operate, maintain, adjust and repair all parts of the works as stated in the specifications.
3.6 The Manuals and Drawings shall be in the ruling language (English) in such form and numbers as stated in the contract.

3.7 Unless and otherwise agreed, the goods equipment shall not be considered to be completed for the purposes of taking over until such manuals and drawing have been supplied to the Purchaser.

4. Packing (GCC Clause 9)  
Add as Clause 9.3 of the GCC of the following:  
Packing Instructions: Each package will be marked on three sides with proper paint/indelible ink, the following:  
i) Item  
ii) Contract No.  
iii) Country of Origin of Goods  
iv) Supplier’s Name and  
v) Packing list reference number.

5. Delivery and Documents (GCC Clause 10)  
Generally the delivery of the goods should be made within 08 weeks from the date of placement of purchase order. Within 24 hours of shipment, the supplier shall notify the purchaser and the insurance company by cable/telex/fax/e mail the full details of the shipment including contract number, railway receipt number/ AWB etc and date, description of goods, quantity, name of the consignee, invoice etc. The Supplier shall mail the following documents to the purchaser with a copy to the insurance company:  

(i) 4 Copies of the Supplier invoice showing contract number, goods’ description, quantity, unit price, total amount;  
(ii) Acknowledgment of receipt of goods from the consignee(s) by the transporters;  
(iii) Insurance Certificate, if any.  
(iv) Manufacturer's/Supplier's warranty certificate;  
(v) Certificate of Origin.  
Two copies of the packing list identifying the contents of each package.  
The above documents should be received by the Purchaser before arrival of the Goods (except where the Goods have been delivered directly to the Consignee with all documents) and, if not received, the Supplier will be responsible for any consequent expenses.

6. Insurance (GCC Clause 11)  
For delivery of goods at the purchaser’s premises, the insurance shall be obtained by the Supplier to an amount equal to 110% of the value of the goods from
"warehouse to warehouse" (final destinations) on "All Risks" basis including War Risks and Strikes. The insurance shall be valid for a period of not less than 3 months after installation and commissioning. However, in case of orders placed on FOB basis, the purchaser shall arrange Insurance.

7. **Incidental services (GCC clause 13)**

   The incidental services to be provided are as under:
   ~ Furnishing of 01 set of detailed operations & maintenance manual along with circuit Diagrams.

8. **Spare Parts (GCC Clause 14)**

   Add as Clause 14.2 to the GCC the following:
   Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spares for the Goods. Other spare parts and components shall be supplied as promptly as possible but in any case within six months of placement of order.

9. **Warranty (GCC Clause 15)**

   In partial modification of the provisions, the warranty period shall be 36 months or as per the period mentioned in the specifications whichever is higher, from date of acceptance of Goods. The Supplier shall, in addition, comply with the performance and/or consumption guarantees specified under the contract. If for reasons attributable to the Supplier, these guarantees are not attained in whole or in part, the Supplier shall at its discretion make such changes, modifications, and/or additions to the Goods or any part thereof as may be necessary in order to attain the contractual guarantees specified in the Contract at its own cost and expense and to carry out further performance tests. The warranty should be comprehensive on site repair/replacement.

10. **Payment (GCC Clause 16)**

    (a) Payment shall be made by the Purchaser to the extent of 90% against installation, commissioning and acceptance of the system/equipment to the entire satisfaction of the Purchaser and the balance 10% will be paid after completion of testing and training and on production of unconditional performance bank guarantee as specified in Clause 2.1 of SCC.

    (b) For imported items, in order to open 100% L.C, the supplier shall furnish an unconditional Performance Bank Guarantee valid till 60 days after the warranty period of installation. The Performance Bank Guarantee to be submitted from a Scheduled Bank of India or any International Bank duly endorsed by Nationalised Bank in India for 10% of the order value along with order acknowledgement, to open L.C for 100%

    (c) Agency commission, if any shall be paid after satisfactory installation & commissioning of the goods at the destination at the exchange rate prevailing on the date of negotiation of LC documents, subject to DGS&D registration for restricted items.
11. **Penalty Clause (GCC Clause 23)**

11.1 For delays: (GCC Clause 23.1)

The applicable rate is 1% per week and the maximum deduction is 10% of the contract price, after which the contract is liable for termination at supplier’s cost, in case of additional expenditure in procurement.

12. **Resolution of Disputes (Clause 28)**

Add as GCC Clause 28.3 the following:

The dispute resolution mechanism to be applied pursuant to GCC Clause 28 shall be as follows:

(a) In case of Dispute or difference arising between the Purchaser and a domestic supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Indian Arbitration & Conciliation Act, 1996, the rules there under and any statutory modifications or re-enactments thereof shall apply to the arbitration proceedings. The dispute shall be referred to the Vice Chancellor, University of Kerala and if he is unable or unwilling to act, to the sole arbitration of some other person appointed by him willing to act as such Arbitrator. The award of the arbitrator so appointed shall be final, conclusive and binding on all parties to this order.

(b) In the case of a dispute between the purchaser and a Foreign Supplier, the dispute shall be settled by arbitration in accordance with provision of sub-clause (a) above. But if this is not acceptable to the supplier then the dispute shall be settled in accordance with provisions of UNCITRAL (United Nations Commission on International Trade Law) Arbitration Rules.

(c) The venue of the arbitration shall be the place from where the order is issued.

13. **Applicable law (GCC clause 30)**

13.1 The place of jurisdiction would be Trivandrum District

14. **Notices**

For the purpose of all notices, the following shall be the address of the Purchaser and Supplier.

**Purchaser:** The Co-Ordinator PURSE  
University of Kerala, Kariavattom Campus  
Kariavattom, P.O., Trivandrum, India 695 581

**Supplier:** (To be filled in by the supplier)  
.............................................  
.............................................  
.............................................  
.............................................
15. **Progress of supply**

Supplier shall regularly intimate progress of supply, in writing, to the Purchaser as under:

- Quantity despatched/delivered to consignees and date;
- Quantity where incidental services have been satisfactorily completed with date;
- Quantity where rectification/repair/replacement effected/completed on receipt of any communication from consignee/Purchaser with date;
- Date of completion of entire Contract including incidental services, if any; and
- Date of receipt of entire payments under the Contract

16. **Right to use defective goods**

16.1 If after delivery, acceptance and installation and within the guarantee and warranty period, the operation or use of the goods proves to be unsatisfactory, the Purchaser shall have the right to continue to operate or use such goods until rectifications of defects, errors or omissions by repair or by partial or complete replacement is made without interfering with the Purchaser’s operation.

17. **Protection against Damage**

17.1 The system shall not be prone to damage during power failures and trip outs, etc. as per SCC.

The normal voltage and frequency conditions available at site as under:

- Voltage 230 volts – Single phase/ 415 V 3 phase (± 10%)
- Frequency 50 Hz. (±10%)

18. **Supplier Integrity**

The Supplier is responsible for and obliged to conduct all contracted activities in accordance with the Contract using state of the art methods and economic principles and exercising all means available to achieve the performance specified in the contract.

19. **Training**

The Supplier is required to train the designated Purchaser’s technical and end user personnel to enable them to effectively operate the total equipment wherever indicated/necessary.
QUALIFICATION REQUIREMENTS/CRITERIA (Refer to ITB 9)

i) The Bidder should be a manufacturer or their dealer specifically authorised by the manufacturer to quote on their behalf for this tender as per Manufacturer Authorisation Form and Indian agents of foreign principals, if any. Who must have designed, manufactured, tested and supplied the equipment(s) similar to the type specified in the “Technical Specification”. Such equipments must be of the most recent series/models incorporating the latest improvements in design. The models should be in successful operation for at least one year as on date of Bid Opening.

Details of Service Centres located in Trivandrum or adjoining areas and information on Service support facilities that would be provided after the warranty period (In the Service Support Form).

That, in the case of a Bidder not doing business in India, the Bidder is/or will be (if Successful) represented by an Agent in India located at Trivandrum or adjoining areas who shall be equipped and able to carry out the Supplier’s maintenance, repairs and Spare parts, stocking obligations prescribed by the conditions of the contract.

That adequate and specialized expertise is already available or will be made available following the execution of the contract in the Purchaser’s country, to ensure that the support services are responsive and adequate.

- That the Bidder will assume total responsibility for the fault-free operation of equipment, application software, if any, and maintenance during the warranty period and provide necessary maintenance services for five years after end of warranty period if required.

- The Indian Agents of foreign manufacturers/ suppliers quoting directly on behalf of their principals for items appearing in the restricted list of the current EXIM policy are registered with DGS&D.

- To maintain sanctity of tendering system one Indian agent cannot represent two different foreign principals in one tender.

- Bidders who meet the criteria given above are subject to be disqualified, if they have made untrue or false representation in the forms, statements and attachments submitted in proof of the qualification requirements or have a record of poor performance, not properly completing the contract, inordinate delays in completion or financial failure, etc.

CO-ORDINATOR, PURSE
Schedule of requirements, Specifications and allied Technical details

The University of Kerala, under PURSE programme, invites sealed quotations for the following item as per the detailed specifications stated below.

Reference No. UOK/PURSE/13-01/2013 Dated 25 07 2013

Quantity required: 1 (One) each.

1. SPECIFICATIONS FOR X-RAY DIFFRACTOMETER

X-ray Diffractometer for analyzing powder materials and thin film materials

Main applications of the system includes:

(A) Powder material characterization,
(B) Thin film characterization,
(C) Reciprocal Space Mapping
(D) Grazing Incidence Diffractometry (GID) for coatings and thin film characterization
(E) Texture analysis
(F) Phase analysis, Stress analysis
(G) Crystallite size

Thin Film Analysis Attachment

LiF (100) Flat Crystal Monochromator for better resolution and peak-to-background ratio with the Parallel Beam Attachment.

1. X-ray Generator:
Microprocessor controlled x-ray generator based on high frequency resonant technology with following specifications attached.

Maximum output power : 3.0 kW
Maximum high voltage : 60 kV or better
Maximum anode current : 60 mA or better
Stability : less than 0.005 % per 10% mains variation or better

2. X-ray Tube:
X-ray tube with ceramic insulation with long fine focus Cu anode with Ni(Kβ) filter, 60 kV, 2200W. The x-ray tube should have electronic tube safety with automatic high voltage protection & also the facility to rotate line & point focus without disconnection and realignment.

3. Optics:
X-ray diffractometer should be based on three dimensional Pre-aligned optics where different optical components such as slit assemblies, sample stages for different applications should be easily exchangeable by the user without any need for re-alignment of the system. Having focusing and parallel beam optics suitable for getting high intensity, high resolution X-ray beam.
4. **Goniometer:**

Goniometer should be of vertical type theta-theta geometry based on optical position sensing system with independent theta & 2-theta drive based on DC motors. The optical readout facilities should be preferably on the shaft of goniometer for life time reproducibility and accuracy.

- Angular accuracy: + 0.005 deg. or better
- Angular reproducibility: + 0.000 1 deg. or better
- 2 theta measurement range: -40 to 160 deg. or better
- Minimum step size: 0.000 1 deg 2Theta or better.

5. **Optical Modules:**

Basic system should be quoted with fixed divergence slit assembly and computer controlled automatic detector slits for optimal control of intensity and resolution. Programmable automatic divergence slit and secondary antiscatter slits to be quoted separately, which should be capable of operation in fixed or automatic mode. Automatic slits should have provision for symmetric as well as asymmetric illumination on the sample to study different portions of the sample.

Secondary curved monochromator for suppression of sample fluorescence to be quoted with basic system.

Incident beam pure K\textalpha 1 monochromator (parallel beam) with parabolic mirror and channel cut crystals in a single module to be quoted.

**Optional:** Quote Hybrid monochromator

6. **Detector:**

High speed & high sensitivity Solid state detector capable to scan a sample much faster than point detectors for low loss and maximum linear range. The high speed detector should function without the need of gas or liquid nitrogen and no calibration.

The solid state detector which can operate in 0D as well as 1D mode. An optical hardware secondary monochromator for the high speed detector to be quoted.

7. **Sample Stage:**

Sample stage for mounting flat powder samples and thin films (for GIXRD) should be provided with at least 10 low background sample holders each.

**Optional:** Optional sample rotation stage to be quoted with holders. Sample stages for covering applications Stress, Texture and Reflectivity (XRR) are also to be quoted as optional items.

8. **Electronics:**

The necessary electronics controller should be able to monitor & control all diffractometer functions such as angles, counts, slits, generator, safety etc.

9. **Computer:**

Desktop computer system with state of art configuration (latest version) with 19” colour monitor and colour laser jet printer.

10. **Softwares:**

Basic system should be quoted with windows based softwares for data collection & complete analysis, peak search, search - match, profile fitting & elaborate pattern treatment such as data smoothing, background subtraction, alpha-2 stripping, semi-quantitative analysis by RIR method etc. (Original catalogues should be enclosed)

Software for complete Crystallography & Reitveld analysis (unit cell, structure determination, indexing, profiling etc) software. Upgradation of software free of cost for at least 5 years.

**Optional:** ICDD PDF2 and PDF4 and ICSD database, Software for X-ray reflectance (XRR).
11. **Safety Enclosure:**
   The system should have complete radiation safety enclosure with lead glass doors with safety switches. System should comply with international radiation safety norms and certificate to be produced.

12. **Other specifications:**
   The diffractometer should have the facility for remote diagnostics & remote operation. The diffractometer should have the facility to mount various optical modules with Pre-aligned attachment for ease of future upgradation. Any new module procured later should be easily integrated with the system without alignment work.
   The equipment should be quoted complete with **water chiller, UPS** with reputed make and sufficient back up for 1 hour for XRD system, and other essential accessories, utilities to run the equipment.

   The vendors should have adequate after sales service facilities in India to provide fast & efficient service. A list of factory trained service personnel should be provided with addresses and contact details of service centers.
   3 years warranty and 2 years extended warranty may be specified with free Annual Maintenance Contract (AMC).
   List of spares required for trouble free operation should be quoted.
   Operating voltage should be 220 – 240 V/ 50Hz.
   The list of users of the offered equipment in India shall be provided along with contact person’s name, email and contact number of comparable model quoted.
   A compliance statement in the form of a table showing the equipment’s specifications against our tender specifications item wise, clearly mentioning whether the model quoted is compliant to be enclosed with offer. Any deviations should also be mentioned against the relevant items. Complete set of original manufacturer’s catalogues to be attached enumerating the specific features indicated in the specifications. The offer is liable to be rejected without proper technical catalogues. 3 years spare kit for the smooth working of the instrument.
   The supplier shall be responsible for free installation and test run of the equipment with complete software applications to the satisfaction of user.

   Note: Any essential hardware/software for the functioning of the instrument not mentioned in this tender specs should also be included in the quotation with justifications.

### 2. Specifications for Atomic Force Microscope (AFM)

#### General Specifications

<table>
<thead>
<tr>
<th>Item</th>
<th>Specifications Required</th>
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<tbody>
<tr>
<td>The single Scanning Probe Microscopy (SPM) system must be capable for all major applications required for the analysis of samples in the field of Materials Science, Semiconductor Technology, Ceramic and Bio Science and Bio-Engineering.</td>
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<tr>
<td>Capable of analyzing conducting and non-conducting nanomaterials.</td>
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<tr>
<td>SPM/AFM must have a tip-scanning configuration.</td>
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<tr>
<td>SPM/AFM must have a system (height) noise ~40 pm RMS, in typical imaging bandwidth.</td>
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<tr>
<td>SPM/AFM scan engagement mechanism must be automated, vertical, and fully software controlled.</td>
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<tr>
<td>Atomic Force Microscope system must be capable to scan small, medium and large size samples with zero background noise.</td>
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</tbody>
</table>
**Mode of Operation**

System must include a general purpose imaging mode with the following features:
1) Automatic optimization of critical imaging parameters including set point, gains, scan rate and Z limit
2) SPM/AFM system mode must operate in both air and liquids.
3) SPM/AFM system does not manually require that the cantilever resonance to be “tuned”.
4) Mode automatically compensates for drift of the deflection signal.

System must include AFM Contact Mode, Non-Contact Mode and Tapping Mode.

System must include provision for current sensing

System must include Dynamic Lateral Force Microscopy (LFM)

System must include Force Modulation & Spectroscopy

System must include Surface Potential Microscopy, Magnetic Force Microscopy (MFM).

System must include the deep trench analysis (DT)

Scanning Tunnelling Microscopy (STM)

**Scanner**

AFM system scanner design must be capable to eliminates artifacts in the images by keeping the relative position of the laser spot fixed in relation to the cantilever throughout the scan cycle.

AFM system scanner design must be capable to open feedback scan control.

AFM system scanner design must be capable to close loop feedback scan control in XY and Z.

Closed-loop XY noise should be < 0.5 nm RMS, in typical imaging bandwidth (625Hz).

Z sensor noise should be < 35 pm RMS, in typical imaging bandwidth (625Hz).

Scanner must have a XY axes scanning range ~90 μm, and Z axes scanning range ~10 μm.

AFM must be capable of scanning atomic resolution images on atomic lattice structures (e.g. Mica).

AFM must be capable of scanning < 300 nm scans in closed loop operation and maintain positional accuracy of < 0.3 nm.

Scanner must be sensored and be able to operate in open and closed-loop in XY and Z.

**Sample Stage**

The sample stage must have an XY travel range of minimum 150 X 150 mm. The travel must be controlled by software.

Sample stage must have a repeatability of 2 μm (unidirectional) and 3 μm (bidirectional), or better.

Sample stage must be able to rotate about its centroid to permit a minimum of 150 mm access with scanner.

**AFM Tips/Probes**

Contact mode AFM probes: Quantity - 75 probes

Non-Contact mode AFM probes: Quantity - 80 Probes
<table>
<thead>
<tr>
<th><strong>Tapping mode AFM probes</strong>: Quantity –70 probes</th>
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</thead>
<tbody>
<tr>
<td><strong>Magnetic probes for MFM</strong>: Quantity - 25 probes</td>
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<table>
<thead>
<tr>
<th><strong>Calibration</strong></th>
<th>AFM calibration kit with necessary standard calibration samples (HOPG, Mica, Gold……) and other tools must be provided.</th>
</tr>
</thead>
</table>

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<tr>
<th><strong>System Optics</strong></th>
<th>AFM scanning cantilever/probe optical surface should be viewable on axis in real time via Direct Optical Video Access by CCD.</th>
</tr>
</thead>
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<tr>
<td></td>
<td>Field-of-View (FOV) must be software controlled zoom and cover the range from 200 μm to 1500 μm.</td>
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<td></td>
<td>Resolution of the optics must be 1.5 μm or better.</td>
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<td>AFM must include top-view optics with motorized focus &amp; digital zoom.</td>
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<td>Optics must have software-controlled white LED illumination.</td>
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<td>Optics must include a 5-Megapixel or higher camera, and software to display and store the optical image from within the AFM software.</td>
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<tr>
<th><strong>System Controller</strong></th>
<th>It must be produce data sets with approximately 5,000 x 5,000 pixel or better density for all channels.</th>
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<td>It must be support use of micro actuated cantilevers for fast scanning.</td>
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<td>It must be allow customizable input/output signal paths through a signal access module integrated inside the controller with BNC connector whose function is software-selectable.</td>
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<td>Must provide at least 3 user accessible lock-in amplifiers: two independent high speed lock-ins (with a minimum range of 1KHz to 5MHz), and one mid-range lock-in (with a minimum range of 0.1Hz to 50KHz)</td>
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<td>It must be provide real time adjustment to all scanning parameters – scan rate, scan size, scan offset, gains and others.</td>
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<td>It must be include an intuitive, easy-to-follow graphic user interface for beginners, which automatically adjusts the scanning parameters (including gains, scan speed, setpoint,...) without user interaction.</td>
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</table>

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<tr>
<th><strong>Scanning Tunnelling Microscope (STM)</strong></th>
<th>The system should be include the high resolution STM with Low Current Capabilities with the noise level ~ ~ 0.3pA.</th>
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</thead>
</table>

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<tr>
<th><strong>Data acquisition and image processing software</strong></th>
<th>a)Automatic cantilever spring constant calibration required</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>b) Free life-time software update</td>
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<td>c) The software must include Macro Language scripting possibilities for optimization of routine operations and user defined experiments.</td>
</tr>
</tbody>
</table>

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<tr>
<th><strong>Image analysis</strong></th>
<th>a)Roughness measurement</th>
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<tbody>
<tr>
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<td>b)Cross section analysis</td>
</tr>
<tr>
<td></td>
<td>c)Grain size analysis</td>
</tr>
<tr>
<td></td>
<td>d)Depth analysis</td>
</tr>
</tbody>
</table>
| software and features                        | e) Histogram analysis  
|                                            | f) Power spectral analysis 
|                                            | g) Fractal analysis  
|                                            | h) Fourier analysis  
|                                            | i) Image mixing 
|                                            | j) Enhanced image filtering tools 
|                                            | k) Autocorrelation  
|                                            | l) Any other features |
| **Image modification and presentation**     | a) 2D Fast Fourier analysis  
| **software & features**                     | b) Plane-fit 
|                                            | c) Force-distance curve analysis  
|                                            | d) High pass and low pass filters 
|                                            | e) Zoom in/out 
|                                            | f) Optional grid on images and curves 
|                                            | g) Variable shading and display angle, tilt  
|                                            | h) Colour bar completely user definable 2D and 3D height presentation  
|                                            | i) Menu for image series presentation  
| **Image and data export format at least**   | a) Export to BMP, JPG, TIFF  
|                                            | b) Export to ASCII format and MatLab  
|                                            | c) Include automated system configuration for operation in liquids to operate these modes by one mouse click  
|                                            | d) Include automated system configurations for advanced modes like SKM, MFM etc to operate these modes by one mouse click  
|                                            | e) Software must be a sole package for all modes and attachments with no need for additional software programs  
|                                            | f) Software package must include both image acquisition and data processing software in one package with no need for different programs operation  
|                                            | g) Software must be free for copy, e.g., can be installed on unlimited number of off-line PC  
|                                            | Detailed Instruction Manuals must be supplied with the instruments  
| **Installlation and training**              | System must be installed, and demonstrated by factory trained service engineers at our site free of charge; Comprehensive on-site training required to our satisfaction  
| **Vibration Isolation with parameters**     | Ultra-low noise vibration isolation system must be included along with the equipment. Please provide details about exact vibration isolation included: clearly specify if the offered isolation is passive or active, which type and its performance  
|                                            | SPM/AFM system must have acoustic isolation enclosure  
| **Computer with Monitor**                  | System must have SPM/AFM compatible latest version high performance computer with high end state of the art processor and Windows based operating system, sufficient number of USB port, 8GB RAM, ~1 9-inch Monitor, DVD RW, Mouse, Keyboard, colour printer etc  
| **Warranty**                                | Three year full warranty and two years of annual maintenance contract on all parts of the equipment and labour including freight charges  
|                                            | |
### Optional Items

| Environmental Control | a) System must support optional Sample temperature control; covering the range of -35 °C up to 250 °C.  
|                       | b) System must have option for liquid scanning assembly with universal liquid chamber.  
|                       | c) System must have option to include electrochemistry cell.  |

| OPERATOR FOR AFM | The Vendor will provide a trained operator at their cost for a period of 3 years. The cost of providing the trained operator must be mentioned separately in the price bid. The price breakup must include monthly salary/wages to be given by the vendor to the trained operator. |

| Image Processing Software | SPIP image processing software than to go with inbuilt software. |

### 3. Instrument performance

Quotation to include full specification of the equipment. The service engineer should demonstrate the various performance parameters of the system according to those mentioned in the brochure or shown on company’s websites and/or quoted in the deal at the University after delivery.

#### 3.1 Analytical Performance

Quotation to include clear, unambiguous statements of expected routine performance of the various preparation systems. It should state:

- a) The overall precisions derived from analyses of multiple replicate samples of standard materials, with a clear indication of any effects in relation to sample size.
- b) Overall sample analysis times and expected throughput of samples per day
- c) Performance test should be demonstrated during final installation at the University for acceptance.

### 4. Additional requirements/items

- a. Full service manuals with complete circuit diagrams and circuit descriptions to be supplied both as hard copy and CDs, along with diagnostic tools including interface cards and software, plus any specialized mechanical tools required for instrument servicing or repair.
- d. Quotation should include training in routine operation and maintenance of all instruments and modules supplied, to include instruction in fault diagnosis, servicing and on-site repair procedures at the University.
- e. Quotation should include prices of full sets of spares and consumables for 3 years for the instrument (all modules) and the associated peripherals and accessories.
- f. The quotation should include a clear statement of all site requirements for installation and operation of the equipment specified.
5. Warranty and maintenance

3-years onsite warranty from the date of satisfactory installation at the University to be provided to include routine maintenance calls and for the Engineer to visit the lab (on call basis). Machine down-time during warranty period should be accounted for to allow and extend the warranty period. It is essential to provide service within 24 hours, from Trivandrum, to ensure smooth operation of the instrument.

6. Training

a). Comprehensive hands-on onsite training for ten personnel in preventive maintenance, operations and application software of the instrument after installation.

7. Accessories, spares and consumables

A comprehensive list of accessories, spares and consumables with catalogue/part number and cost should be provided.

8. List of Users in India

A complete list of Indian Users and the systems that are being handled shall be provided with the name and address of the contact person against each user institute.

9. Pre-installation requisites

The vendor should suggest specifications for the following:

a. Air Conditioner: - required for temperature maintenance of the machine especially the electronics and electromagnet to give the best performance.

b. Uninterrupted Power Supply (UPS)

c. Isolation Transformer: - required for eliminating spikes to prevent damage of the electronics console.

d. Dehumidifier: - required for eliminating atmospheric moisture, which may affect measurements.

e. Space requirements, electrical power quality specifications, operating environment (e.g., cleanliness level, room temperature, exhaust system, cooling water etc) and all other important requisites should be mentioned in the specification.
## PRICE SCHEDULE FOR GOODS BEING OFFERED FROM ABROAD

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Item Description</th>
<th>Country of Origin</th>
<th>Unit</th>
<th>Quantity</th>
<th>Unit Price</th>
<th>Total price (5x6)</th>
<th>Charges for Insurance &amp; transportation FOB/FCB port/place of shipment</th>
<th>Total price (7+8)</th>
<th>Indian Agents Commission as a percent of FOB/FCA price included in the quoted price</th>
<th>Total Bid price in foreign currency:</th>
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<td>Signature of Bidder:</td>
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<td>Name:</td>
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<td>Business Address:</td>
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</tbody>
</table>

(a) Indian agents name & address:

(b) Installation, commissioning charges, if any

(c) Cost of Spares

(d) The Indian agent’s commission shall be paid in Indian Rupees only based on the Exchange Rate prevailing on the date of negotiation of documents in accordance with clause 22.1 of GCC.
## PRICE SCHEDULE FOR GOODS BEING OFFERED FROM INDIA

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Item Description</th>
<th>Country of Origin</th>
<th>Unit</th>
<th>Quantity</th>
<th>Ex-Works. warehouse, Ex-show room off the shelf price (inclusive of all taxes already paid)</th>
<th>Total price Ex-Works.</th>
<th>VAT &amp; other taxes like excise duty payable, if contract is awarded</th>
<th>Packing &amp; for warding upto station of dispatch</th>
<th>Charges for inland transportation, insurance to ultimate destination</th>
<th>Installation, Commissioning Charges, If any</th>
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</table>

Total Bid price in Indian currency: In words:

Signature of Bidder
Name
Business Address

Note: (a) The cost of optional items shall be indicated separately.
THIS CONTRACT AGREEMENT is made the [insert: number] day of [insert: month], [insert: year].

BETWEEN
(1) The University of Kerala having its office at Kariavattom, Trivandrum (District), Kerala, Pin-695 581, India represented by The Co-Ordinator PURSE (hereinafter called “the Purchaser” which expression, where the context admits, shall include its successors), and

(2) [insert name of Supplier], a corporation incorporated under the laws of [insert: country of Supplier] and having its principal place of business at [insert: address of Supplier] (hereinafter called “the Supplier” which expression, where the context admits, shall include its successors, assigns and nominees).

WHEREAS the Purchaser invited bids for certain Goods and ancillary services, viz., [insert brief description of Goods and Services] and has accepted a Bid by the Supplier for the supply of those Goods and Services in the sum of [insert Contract Price in words and figures, expressed in the Contract currency (ies)] (hereinafter called “the Contract Price”).

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.

2. The following documents shall constitute the Contract between the Purchaser and the Supplier, and each shall be read and construed as an integral part of the Contract:

   (a) This Contract Agreement
   (b) Special Conditions of Contract
   (c) General Conditions of Contract
   (d) Technical Requirements (including Schedule of Requirements and Technical Specifications)
   (e) The Supplier’s Bid and original Price Schedules
   (f) The Purchaser’s Notification of Award
   (g) [Add here any other document(s)]

3. This Contract shall prevail over all other Contract documents. In the event of any discrepancy or inconsistency within the Contract documents, then the documents shall prevail in the order listed above.

4. In consideration of the payments to be made by the Purchaser to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Purchaser to provide the Goods and Services and to remedy defects therein in conformity in all respects with the provisions of the Contract.

   5. The Purchaser hereby covenants to pay the Supplier in consideration of the provision of the Goods and Services and the remedying of defects therein, the Contract Price or such other sum
as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of Union of India on the day, month and year indicated above.

For and on behalf of the University of Kerala

Signed: [insert signature]
in the capacity of [insert title or other appropriate designation] in
the presence of [insert identification of official witness]

Signed: [insert signature]
in the capacity of [insert title or other appropriate designation] in
the presence of [insert identification of official witness]

For and on behalf of the Supplier

Signed: [insert signature of authorized representative(s) of the Supplier] in
the capacity of [insert title or other appropriate designation]
in the presence of [insert identification of official witness]
Bidder Information Form

[The Bidder shall fill in this Form in accordance with the instructions indicated below. No alterations to its format shall be permitted and no substitutions shall be accepted. This should be done of the letter head of the firm]

Date: [insert date (as day, month and year) of Bid Submission] Tender No.: [insert number from Invitation for bids]

1. Bidder’s Legal Name [insert Bidder’s legal name]

2. In case of JV, legal name of each party: [insert legal name of each party in JV]

3. Bidder’s actual or intended Country of Registration: [insert actual or intended Country of Registration]

4. Bidder’s Year of Registration: [insert Bidder’s year of registration]

5. Bidder’s Legal Address in Country of Registration: [insert Bidder’s legal address in country of registration]

6. Bidder’s Authorized Representative Information
   Name: [insert Authorized Representative’s name]
   Address: [insert Authorized Representative’s Address]
   Telephone/Fax numbers: [insert Authorized Representative’s telephone/fax numbers]
   Email Address: [insert Authorized Representative’s email address]

Signature of the Bidder
Name

Business Address
BID SECURITY FORM

Whereas .......................................................... (hereinafter called “the Bidder”) has submitted its bid dated .......................... (Date of submission of bid) for the supply of ...................... (Name and/or description of the goods) (Hereinafter called “the Bid”).

KNOW ALL PEOPLE by these presents that WE ........................................... (Name of bank) of ........................................... (Name of country), having our registered office at ........................................... (Address of bank) (Hereinafter called “the Bank”), are bound unto ........................................... (Name of Purchaser) (Hereinafter called “the Purchaser”) in the sum of ................................. (Name and/or description of the goods) for which payment well and truly to be made to the said Purchaser, the Bank binds itself, its successors, and assigns by these presents. Sealed with the Common Seal of the said Bank this ____ day of _________ 2013.

THE CONDITIONS of this obligation are:

1. If the Bidder withdraws its Bid during the period of bid validity specified by the Bidder on the Bid Form; or

2. If the Bidder, having been notified of the acceptance of its bid by the Purchaser during the period of bid validity:

   (a) Fails or refuses to execute the Contract Form if required; or

   (b) Fails or refuses to furnish the performance security, in accordance with the Instruction to Bidders.

We undertake to pay the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it, owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions. This guarantee will remain in force up to and including forty-five (60) days after the period of the bid validity, and any demand in respect thereof should reach the Bank not later than the above date.

...........................................

(Signature of the Bank)

Name of Bidder
PERFORMANCE SECURITY FORM

To: The Co-Ordinator PURSE, University of Kerala, Kariavattom, Trivandrum

WHEREAS ..................................................(Name of Supplier)
Hereinafter called "the Supplier" has undertaken, in pursuance of Contract no ..............................
Dated,............ 2013 to supply .............................................................(Description of Goods
and Services) hereinafter called "the Contract".

AND WHEREAS it has been stipulated by you in the said Contract that the Supplier shall
furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security
for compliance with the Supplier’s performance obligations in accordance with the Contract.

AND WHEREAS we have agreed to give the Supplier a Guarantee:

THEREFORE WE hereby affirm that we are Guarantors and responsible to you, on behalf of
the Supplier, up to a total of .................................................................(Amount of the
Guarantee in Words and Figures) and we undertake to pay you, upon your first written demand
declaring the Supplier to be in default under the Contract and without cavil or argument, any sum
or sums within the limit of .............................(Amount of Guarantee) as aforesaid, without your
needing to prove or to show grounds or reasons for your demand or the sum specified therein.
This guarantee is valid until the ..... day of .................2013.

Signature and Seal of Guarantors
........................................
........................................
........................................

Date ..........................2013
Address: .........................
........................................
........................................
**PERFORMANCE STATEMENT FORM**  
*(For A Period of Last 3 Years)*

Name of the Firm…………………………………………………..

<table>
<thead>
<tr>
<th>Order placed by (full address of purchaser)</th>
<th>Order No. and date</th>
<th>Description and quantity of ordered equipment</th>
<th>Price</th>
<th>Date of completion of delivery as per Contract/ Actual</th>
<th>Remarks indicating reasons for late delivery, if any</th>
<th>Has the equipment been installed satisfactory? (Attach a certificate from the purchaser/Consignee)</th>
<th>Contact Person along with Tel. NO., Fax No. &amp; e-mail address</th>
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Signature

Rubber stamp Place :

Date :

42
MANUFACTURERS’ AUTHORIZATION FORM

No. ________________________________________________ Dated

The Co-Ordinator PURSE Programme,
University of Kerala
Kariavattom Campus
Kariavattom, P.O.
Trivandrum 695 581
Kerala, India

Dear Sir:

We __________________________ who are established and reputable manufacturers of having factories at ______________________ (address of factory) do hereby authorize M/s (Name and address of Agent) to submit a bid, negotiate and receive the order from you against your tender enquiry.

No company or firm or individual other than M/s ______________________ is authorized to bid, and conclude the contract in regard to this business.

We hereby extend our full guarantee and warranty as per Clause 15 of the General Conditions of Contract and Clause of the Special Conditions of Contract for the goods and services offered by the above firm.

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 manufacturer. It should be included by the Bidder in its techno-commercial unpriced bid.
<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Nature of training imparted</th>
<th>List of similar type equipments serviced in the past 3 years</th>
<th>Local Address, Telephone Nos. Fax Nos and e mail address of the firm located at Chennai or adjoining areas</th>
<th>Value of minimum stock of consumable spares held at all Times</th>
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</table>

Signature and Seal of the manufacturer/Bidder……………………………………

Place: Date:
Bid Form

[The Bidder shall fill in this Form in accordance with the instructions indicated. No alterations to its format shall be permitted and no substitutions shall be accepted.]

Date: [insert date (as day, month and year) of Bid Submission]
Tender No.: [insert number from Invitation for Bids]
Invitation for Bid No.: [insert No of IFB]

To:

The Co-Ordinator PURSE Programme,
University of Kerala
Kariavattom Campus
Kariavattom. P.O.
Trivandrum 695 581
Kerala, India

We, the undersigned, declare that:

(a) We have examined and have no reservations to the Bidding Documents, including Addenda No.: [insert the number and issuing date of each Addenda];

(b) We offer to supply in conformity with the Bidding Documents and in accordance with the Delivery Schedules specified in the Schedule of Requirements the following Goods and Related Services [insert a brief description of the Goods and Related Services];

(c) The total price of our Bid, excluding any discounts offered in item (d) below, is: [insert the total bid price in words and figures, indicating the various amounts and the respective currencies];

(d) The discounts offered and the methodology for their application are:

Discounts. If our bid is accepted, the following discounts shall apply. [Specify in detail each discount offered and the specific item of the Schedule of Requirements to which it applies.]

(e) Our bid shall be valid for the period of time specified in ITB Sub-Clause 20.1, from the date fixed for the bid submission deadline in accordance with ITB Sub-Clause 24.1, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;

(f) If our bid is accepted, we commit to obtain a performance security in accordance with ITB Clause 41 and GCC Clause 29 for the due performance of the Contract;

(g) The following commissions, gratuities, or fees have been paid or are to be paid with respect to the bidding process or execution of the Contract: [insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity]
<table>
<thead>
<tr>
<th>Name of Recipient</th>
<th>Address</th>
<th>Reason</th>
<th>Amount</th>
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(If none has been paid or is to be paid, indicate “none.”)

(k) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed.

(l) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.

Signed: [insert signature of person whose name and capacity are shown]
In the capacity of [insert legal capacity of person signing the Bid Submission Form]

Name: [insert complete name of person signing the Bid Submission Form]

Duly authorized to sign the bid for and on behalf of: [insert complete name of Bidder]

Dated on _ day of , [insert date of signing]