



## सीएसआईआर- राष्ट्रीय अंतर्विषयी विज्ञान तथा प्रौद्योगिकी संस्थान

CSIR - National Institute For Interdisciplinary Science & Technology  
Industrial Estate PO., Pappanamcode, TRIVANDRUM-695019, KERALA, INDIA

टेलीफोन/ TELEPHONE -00 -91-0471-2515239, 2515256,2535510

फैक्स /FAX : 00 -91-0471-2491895, 2491712 E-mail : [spo@niist.res.in](mailto:spo@niist.res.in)

### निविदा आमंत्रण सूचना /NOTICE INVITING TENDER

निदेशक, राष्ट्रीय अंतर्विषयी विज्ञान तथा प्रौद्योगिकी संस्थान, तिरुवनंतपुरम-19 आयातकों/प्राधिकृत भारतीय एजेंटों/निर्माताओं से दो बोली प्रणाली के तहत निम्नलिखित उपकरणों की आपूर्ति/संस्थापना/उत्थापन तथा कमीशनिंग के लिए मुहरबंद निविदाएं आमंत्रित करते हैं। /The Director, National Institute for Interdisciplinary Science & Technology, Trivandrum-19 invites Sealed Tenders under Two Bid System from IMPORTERS/ AUTHORISED INDIAN AGENTS/MANUFACTURERS for the supply, installation/Erection and commissioning of the following Equipments:-

क्र.सं./ Sl.No	फाइल सं./File No.	विवरण/Description	ईएमडी/ EMD (₹)
1	PUR/IMP/095/14	पूरी तरह मोटर चालित इन्वर्टेड फ्लोरोसेंट माइक्रोस्कोप/ FULLY MOTORIZED INVERTED FLUORESCENT MICROSCOPE	137500
2	PUR/IMP/096/14	रिसाइकिलिंग टाइप प्रारंभिक एचपीएलसी/ RECYCLING TYPE PREPARATIVE HPLC	87500
3	PUR/IMP/100/14	विश्लेषणात्मक / प्रारंभिक एचपीएलसी ANALYTICAL/ PREPARATIVE HPLC	100000
4	PUR/IMP/101/14	पोलरीज्ड ऑप्टिकल माइक्रोस्कोप POLARIZED OPTICAL MICROSCOPE	62500
5	PUR/IMP/112/14	एक्स-रे फोटो इलेक्ट्रॉन स्पेक्ट्रोस्कोपी (एक्सपीएस)/ X-RAY PHOTOELECTRON SPECTROSCOPY( XPS)	687500

सीएसआईआर-एनआईआईएसटी में 28.11.2014 को प्रातः 11.00 बजे प्री बिड कॉन्फ्रेंस आयोजित किया जाएगा। सभी इच्छुक बोलीदाताओं से उसमें भाग लेने का अनुरोध है। प्री बिड कॉन्फ्रेंस के बाद निविदा दस्तावेज में अगर किसी भी संशोधन हो, तो उसे केवल वेबसाइट पर उपलब्ध कराया जाएगा। निविदा दस्तावेज/निर्दिष्टीकरण हमारी वेबसाइट <http://www.niist.res.in> से मुफ्त डाउनलोड किया जा सकता है। निवेदित भाव प्रस्तुत करने की अंतिम तिथि व समय 12.12.2014 को आईएसटी समय 12.00 घंटे है और निविदा उसी दिन 1400 घंटे को खोली जाएगी।

**A PRE-BID CONFERENCE WILL BE HELD ON 28.11.2014 AT 1100 HRS, AT CSIR-NIIST.** All interested bidders are requested to attend. Modification if any in the Tender document after the Pre-bid Conference would be hosted on the website only.

The tender documents / specification can be downloaded from our website <http://www.niist.res.in> **ON FREE OF COST.** Last Date & time of submission of quotation is IST **1200 Hrs** on **12.12.2014** and the Tenders will be Opened on the **same day at 1400 Hrs.**

ह/सद/-

भंडार एवं क्रय अधिकारी/ Stores & Purchase Officer

फाइल सं./ File No.: PUR/IMP/095/096/100/101/112/14

तारीख/Date: 11.11.2014



**TENDER DOCUMENT FOR**  
**THE PURCHASE OF**

- ❖ **Fully Motorized Inverted Fluorescent Microscope**
- ❖ **Recycling Type HPLC**
- ❖ **Analytical / Preparative HPLC**
- ❖ **Polarized Optical Microscope**
- ❖ **X-Ray Photoelectron Spectroscopy (XPS)**

(specification attached @ Chapter 7.)

**CSIR - NATIONAL INSTITUTE FOR  
INTERDISCIPLINARY SCIENCE AND  
TECHNOLOGY**

**INDUSTRIAL ESTATE PAPPANAMCODE TRIVANDRUM -19  
| KERALA INDIA ( <http://www.niist.res.in> )**

Ph: 0471 2515239, FAX: 0471 2491895

Email; [spo@niist.res.in](mailto:spo@niist.res.in)

## INVITATION FOR BIDS / NIT

Director, NIIST, Industrial Estate, Pappanamcode, Trivandrum - 695019 (Kerala), India invites sealed bids from you for the following Equipments:-

Sl. No.	File No.	Description of items	Quantity	Single/ Double bid	Bid Security (EMD) in Indian Rupees
1.	PUR/IMP/095/14	FULLY MOTORIZED FLUORESCENT MICROSCOPE	1	Double	Rs. 137500
2	PUR/IMP/096/14	RECYCLINGTYPE PREPARATIVE HPLC	1	Double	Rs. 87500
3	PUR/IMP/100/14	ANALYTICAL / PREPARATIVE HPLC	1	Double	Rs. 100000
4	PUR/IMP/101/14	POLARIZED OPTICAL MICROSCOPE	1	Double	Rs. 62500
5	PUR/IMP/112/14	X-RAY PHOTOELECTRON SPECTROSCOPY (XPS)	1	Double	Rs. 687500

1. ITB, GCC, SCC, Price Schedule forms, schedule of requirement other standard forms have been attached, which will form part and parcel of this tender.
2. A **Pre-bid conference** will be held on **28.11.2014 at 1100 hrs IST** at CSIR- NIIST. All interested bidders are requested to attend. **Modification if any in the Tender document after the Pre-bid Conference would be hosted on the website only.**
3. **The last date for receipt of Tender is 12.00 Hrs. on 12.12.2014 and the same would be opened at 1400 Hrs (IST).**
4. All bids must be accompanied by a bid security **favoring Director, NIIST** as specified above and must be delivered to the above office at the date and time indicated above along with the Technical Bid. Bids will be opened in the presence of Bidders' representatives who choose to attend on the specified date and time. In the event of the date specified for bid receipt and opening being declared as a closed holiday for purchaser's office, the due date for submission of bids and opening of bids will be the following working day at the appointed time.
5. The Director, NIIST reserves the right to accept any or all tenders either in part or in full or to split the order without assigning any reasons there for.

## Table of contents

<b>Chapter No.</b>	<b>Contents</b>	<b>Page No.</b>
1	Instructions to bidders	01
2	General Conditions of Contract (GCC) & Special Condition of Contract (SCC)	16
3	Price Schedule Forms	33
4	Qualification Requirements	36
5	Contract Form	37
6	Other Standard Forms	39
7	Specifications and other Technical details	50

## CHAPTER 1

### INSTRUCTIONS TO BIDDER

#### Table of Contents

Sl. No.	Clause	Page No.
01.	Eligible Bidders	2
02.	Cost of Bidding	2
03.	Fraud and Corruption	2
04.	Cost of Bidding Documents	3
05.	Content of Bidding Documents	3
06.	Clarification of bidding documents	3
07.	Amendment of Bidding Documents	4
08.	Language of Bid	4
09.	Documents Comprising the Bid	4
10.	Bid form and price schedule	4
11.	Bid Prices	5
12.	Bid Currencies	5
13.	Documents Establishing Bidder's Eligibility and qualifications	6
14.	Documents Establishing Goods' Eligibility And Conformity to Bidding Documents	6
15.	Bid Security	7
16.	Period of Validity of Bids	8
17.	Format and Signing of Bid	8
18.	Submission, Sealing and Marking of Bids	8
19.	Deadline for Submission of Bids	9
20.	Late Bids	9
21.	Withdrawal, substitution and Modification of Bids	9
22.	Opening of Bids by the Purchaser	10
23.	Confidentiality	10
24.	Clarification of Bids	11
25.	Preliminary Examination	11
26.	Responsiveness of Bids	11
27.	Non-Conformity, Error and Omission	12
28.	Examination of Terms & Conditions, Technical Evaluation	12
29.	Conversion to Single Currency	12
30.	Evaluation and Comparison of bids	13
31.	Contacting the Purchaser	13
32.	Post qualification	13
33.	Negotiations	13
34.	Award Criteria	14
35.	Purchaser's right to vary Quantities at Time of Award	14
36.	Purchaser's right to accept any Bid and to reject any or all Bids	14
37.	Notification of Award	14
38.	Signing of Contract / Order Acceptance	14
39.	Performance Security	15
40.	Representation	15

## **A. Introduction**

### **1. Eligible Bidders**

- 1.2 Bidders should not be associated, or have been associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Purchaser to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the goods to be purchased under this Invitation of Bids.

### **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.

### **3. Fraud and corruption:**

- 3.1 The purchaser requires that the *bidder's* suppliers and contractors observe the highest standard of ethics during the procurement and execution of such contracts. In pursuit of this policy, the following are defined:

"Corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the procurement process or in contract execution;

"Fraudulent practice" means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract;

"Collusive practice" means a scheme or arrangement between two or more bidders, with or without the knowledge of the purchaser, designed to establish bid prices at artificial, noncompetitive levels; and

"Coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the procurement process or affect the execution of a contract;

- 3.2 The purchaser will reject a proposal for award if it determines that the Bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for the Contract in question;

## **B. The Bidding Documents**

### **4. Cost of Bidding Documents**

- 4.1 Interested eligible bidders may purchase the bidding documents on payment of the cost of bidding documents as indicated in the invitation for bids/NIT or alternatively, the bidding documents can be downloaded from our Website(<http://www.niist.res.in> ) as indicated in the Invitation for Bids/NIT free of cost.

### **5. Content of Bidding Documents**

- 5.1 The goods required, bidding procedures and contract terms are prescribed in the bidding documents which should be read in conjunction. The bidding documents, apart from the invitation for bids have been divided into 7 chapters as under:

Chapter 1	:	Instructions to Bidder <b>(ITB)</b>
Chapter 2	:	General Conditions of Contract <b>(GCC)</b> and Special Conditions of Contract <b>(SCC)</b>
Chapter 3	:	Schedule of Requirements and Specifications and Allied Technical Details
Chapter 4	:	Price Schedule Forms
Chapter 5	:	Qualification requirements
Chapter 6	:	Contract Form
Chapter 7	:	Other Standard Forms comprising:
		(a) Manufacturer's Authorization Form <b>(MAF)</b> ;
		(b) Bid Security Form
		(c) Performance Statement Form
		(d) Deviation Statement Form;
		(e) Service Support details;
		(f) Bid Form
		(g) Performance Security Form;
		(h) Acceptance Certificate Form

- 5.2 The Bidder is expected to examine all instructions, forms, terms, and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or submission of a bid not substantially responsive to the bidding documents in every respect will be at the Bidder's risk and may result in rejection of its bid.

### **6. Clarification of bidding documents**

- 6.1 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 not later than ten (10) days prior to the deadline for submission of bids. The Purchaser shall forward copies of its response to all those who have acquired the Bidding Documents directly from it, including a description of the inquiry but without identifying its source. Should the Purchaser deem it necessary to amend the bidding documents as a result of a clarification, it shall do so following the procedure under clause relating to amendment of bidding documents and clause relating to deadline for submission of bids. The clarifications and amendments issued would also be hosted on the website of the purchaser for the benefit of the other prospective bidders.

## **7. Amendment of Bidding Documents**

- 7.1 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.
- 7.2 Any amendment to the tender document would be hosted on the website [www.niist.res.in](http://www.niist.res.in) and prospective bidders are requested to be in touch with the website. This will also hold true for all modifications and amendments after the pre bid conference.
- 7.3 In order to allow prospective bidder's 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**

## **8. Language of Bid**

- 8.1 The bid prepared by the bidder, as well as all correspondence and documents relating to the bid exchanged by the bidder and the purchaser, shall be written in English language only.
- 8.2 The Supplier shall bear all costs of translation, if any, to the English language and all risks of the accuracy of such translation, for documents provided by the Supplier.

## **9. Documents Comprising the Bid**

- 9.1 The bid prepared by the Bidder shall include:
  - (a) Bid security as specified in the Invitation to bids along with technical bid.
  - (b) Service support details Form along with technical bid.
  - (c) Deviation Statement Form along with technical bid.
  - (d) Performance Statement Form along with technical bid.
  - (e) Manufacturer's Authorization Form along with technical bid.
  - (f) Documentary evidence establishing that the bidder is eligible to bid and is qualified to perform the contract if its bid is accepted.
  - (g) Bid form and applicable Price Schedule Form (as per clause ITB 17).
  - (h) Documents establishing goods eligibility and conformity to bidding documents.
  - (i) DGS&D Registration certificate in case the items under procurement falls under the restricted category of the current export-import policy of the Govt. of India.

## **10. Bid form and price schedule**

- 10.1 The bidder shall complete the Bid Form and the appropriate price schedule form Furnished in the bidding documents. These forms must be completed without any Alterations to its format and no substitutes shall be accepted. All blank spaces shall be Filled in with the information requested.



## 11. Bid Prices

11.1 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.

11.2 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.

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

**11.4.1 Where there is no mention of packing, forwarding, freight, insurance charges, 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.**

11.5 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.

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

11.7 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.

## 12. Bid Currencies

12.1 Prices shall be quoted in Indian Rupees for offers received for supply within India and in freely convertible foreign currency in case of offers received for supply from foreign countries.

### **13. Documents Establishing Bidder's Eligibility and qualifications**

13.1 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.

13.2 The documentary evidence of the bidders qualification to perform the contract if the bid is accepted shall establish to the purchasers satisfaction that;

(a) The bidder meets the qualification criteria listed in bidding documents.

(b) Bidder that doesn't manufacture the goods it offers to supply shall submit Manufacturers' Authorization Form (MAF) using the form specified in the bidding document to demonstrate that it has been duly authorized by the manufacturer of the goods to quote and/or supply the goods.

(c) In case a bidder not doing business within the purchasers' country, that the bidder is or will be represented by an agent in the country equipped and able to carry out the supply, maintenance, repair obligations etc. during the warranty and post-warranty period or ensure a mechanism at place for carrying out the supply, maintenance, repair obligations etc. during the warranty and post-warranty period.

### **13.3 Conditional tenders shall not be accepted**

### **14. Documents Establishing Goods' Eligibility and Conformity to Bidding Documents**

14.1 To establish the goods' eligibility, 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.

14.2 To establish the conformity of the goods and services to the specifications and schedule of requirements of the bidding document, 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 during the warranty period following commencement of the use of the goods by the Purchaser in the Priced- bid ; 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.

14.3 For purposes of the commentary to be furnished pursuant to above, the Bidder shall note that standards for workmanship, material and equipment, designated by the Purchaser in its Technical Specifications are intended to be descriptive only and not restrictive. The Bidder may substitute these in its bid, provided that it demonstrates to the Purchaser's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications.

## 15. Bid Security

- 15.1 The Bidder shall furnish, as part of its bid, a bid security (**BS**) for an amount as specified in the Invitation for Bids. In the case of foreign bidders, the BS shall be submitted either by the principal or by the Indian agent and in the case of indigenous bidders; the BS shall be submitted by the manufacturer or their specifically authorized dealer/bidder along with technical bid.
- 15.2 The bid security is required to protect the Purchaser against the risk of Bidder's conduct, which would warrant the security's forfeiture.
- 15.3 The bid security shall be in Indian Rupees for offers received for supply within India and denominated in the currency of the bid or in another freely convertible currency in the case of offers received for supplies from foreign countries in equivalent Indian Rupees. The bid security shall be in one of the following forms at the bidders' option:
- (a) A bank guarantee issued by a Nationalized/Scheduled bank/Foreign Bank in the form provided in the bidding documents and valid for 45 days beyond the validity of the bid; or
  - (b) A Banker's cheque or demand draft in favor of the purchaser.
- 15.4 The bid security shall be payable promptly upon written demand by the purchaser in case the conditions listed in the ITB clause 15.11 are invoked.
- 15.5 The bid security should be submitted in its original form. Copies shall not be accepted.
- 15.6 Any bid not secured in accordance with above will be rejected by the Purchaser as non-responsive.
- 15.7 The bid security of unsuccessful bidder will be discharged /returned promptly but not later than 15 days after the expiration of the period of bid validity or placement of order whichever is later.
- 15.8 The successful Bidder's bid security will be discharged upon the Bidder furnishing the performance security.
- 15.9 The firms registered with DGS&D & NSIC, if any, are exempted from payment of BS provided such registration includes the item they are offering which are manufactured by them and not for selling products manufactured by other companies.
- 15.10 The bid security may be forfeited:
- (a) If a Bidder withdraws or amends or impairs or derogates 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 of the order and/or fails to furnish Performance Security within 21 days from the date of contract/ order.

## 16. Period of Validity of Bids

- 16.1 Bids shall remain valid for 150 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.
- 16.2 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 fax or e-mail). The bid security provided 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.
- 16.3 Bid evaluation will be based on the bid prices without taking into consideration the above corrections.

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

- 17.1 The bids should be submitted in two parts namely *Part 1* (technical bid along with EMD and other enclosures as asked for) *Part 2*(commercial bid) as specified in the Invitation for Bids.
- 17.2 The Bidder shall submit the bids in two separate parts. One part shall contain Technical bid comprising all documents listed under clause relating to Documents Comprising the Bid excepting bid form and price schedules. The other part shall contain the priced-bid comprising bid form and price- schedules. **The Bidder shall prepare two copies of the bid, clearly marking each "Original Bid" and "Copy Bid", as appropriate.**
- 17.3 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 printed literature, shall be initialed by the person or persons signing the bid.
- 17.4 Any interlineations, erasures or overwriting shall be valid only if they are initialed by the persons or persons signing the bid.
- 17.5 Firms submitting bids in a single envelope against the requirement of two bid system would be considered for further evaluation at the risk & responsibility of the bidder.

#### **D. Submission and sealing of Bids**

#### **18. Submission, Sealing and Marking of Bids**

- 18.1 The bidders may submit their bids by post or by hand. **E-mail quotations/fax quotations will not be accepted and would be summarily rejected**
- 18.2 In the case of bids invited on two part basis, the Bidder shall seal the unpriced bid and the priced bid in two separate envelopes duly marked as "Technical bid" and "commercial bid". Both the envelopes shall then be sealed in one outer envelope.
- 18.3 (a) the inner and outer envelopes shall be addressed to the Purchaser indicated in the **SCC**.
- (b) Bear the name and address of the bidder, Tender No., due date and a Warning "Do not open before \_\_\_\_\_" to be completed with the time and Date as specified in the invitation for bids.
- 18.5 If the outer envelope is not sealed and marked as required above, the Purchaser will assume no responsibility for the bid's misplacement or premature opening. In such

cases, bids received in open condition within the due date and time will be accepted at the risk of the bidder if the same is presented to the Stores & Purchase officer before expiry of the due date and time of opening of the bids.

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

- 19.1 Bids must be received by the Purchaser at the address specified in Invitation for bids not later than the time and date specified therein. 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.
- 19.2 The Purchaser may, at its discretion, extend the deadline for submission of bids by amending the bid documents in accordance with Clause relating to Amendment of Bidding Documents 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.

#### **20. Late Bids**

- 20.1 Any bid received by the Purchaser after the deadline for submission of bids prescribed by the Purchaser will be rejected.
- 20.2 Such tenders shall be marked as late and not considered for further evaluation. They shall not be opened at all and be returned to the bidders in their original envelope without opening.

#### **21. Withdrawal, substitution and Modification of Bids**

- 21.1 A Bidder may withdraw, substitute, or modify its Bid after it has been submitted by sending a written notice in accordance with ITB Clause 18 duly signed by an authorized representative, and shall include a copy of the authorization in accordance with ITB Sub-Clause 17.4 (except that no copies of the withdrawal notice are required). The corresponding substitution or modification of the bid must accompany the respective written notice. All notices must be:
- (a) submitted in accordance with ITB Clauses 17 and 18 (except that withdrawal notices do not require copies), and in addition, the respective envelopes shall be clearly marked "WITHDRAWAL," "SUBSTITUTION," or "MODIFICATION;" and
  - (b) Received by the Purchaser prior to the deadline prescribed for submission of bids, in accordance with ITB Clause 19.
- 21.2 Bids requested to be withdrawn in accordance with ITB Sub-Clause 21.1 shall be returned unopened to the Bidders. No bid may be withdrawn, substituted, or modified 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 or any extension thereof.

### **E. Opening and Evaluation of Bids**

#### **22. Opening of Bids by the Purchaser**

- 22.1 The Purchaser will open all bids one at a time in the presence of Bidders' representatives who choose to attend, as per the schedule given in invitation for 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. In two part system, the financial bid shall be opened after technical evaluation.

- 22.2 First, envelopes marked "WITHDRAWAL" shall be opened and read out and the envelope with the corresponding bid shall not be opened, but returned to the Bidder. No bid withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at bid opening. Next, envelopes marked "SUBSTITUTION" shall be opened and read out and exchanged with the corresponding Bid being substituted, and the substituted Bid shall not be opened, but returned to the Bidder. No Bid substitution shall be permitted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out at bid opening. Envelopes marked "MODIFICATION" shall be opened and read out with the corresponding Bid. No Bid modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is read out at Bid opening. Only envelopes that are opened and read out at Bid opening shall be considered further.
- 22.3 The bidders' names, bid modifications or withdrawals, bid prices, discounts, 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(s). The contents of the bid forms and price schedules would however be announced only at the time of opening of Priced-bids in the case of two-bid system.
- 22.4 Bids that are received late shall not be considered further for evaluation, irrespective of the circumstances.

### **23. Confidentiality**

- 23.1 Information relating to the examination, evaluation, comparison, and post qualification of bids, and recommendation of contract award, shall not be disclosed to bidders or any other persons not officially concerned with such process until publication of the Contract Award.
- 23.2 Any effort by a Bidder to influence the Purchaser in the examination, evaluation, comparison, and post qualification of the bids or contract award decisions may result in the rejection of its Bid.

### **24. Clarification of Bids**

- 24.1 To assist in the examination, evaluation, comparison and post qualification of the 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, at the discretion of the purchaser. **Any clarification submitted by a bidder in respect to its bid which is not in response to a request by the purchaser shall not be considered.**

### **25. Preliminary Examination**

- 25.1 The Purchaser shall examine the bids to confirm that all documents and technical documentation requested in ITB Clause 9 have been provided, and to determine the completeness of each document submitted.

- 25.2 The Purchaser will examine the technical 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. The purchaser may discuss the technical bid with the bidders, if required who may modify their bids to suit the requirement. Those whose technical specification does not reach the threshold level of acceptability will be rejected as technically unsuitable. The bidders who finally emerge as technically acceptable will be allowed to withdraw their price bids and send again a revised bid in a sealed envelope or to adhere to the original price bid sent. These price bids will be opened, evaluated and the contract awarded to the lowest evaluated bidder.

## **26. Responsiveness of Bids**

- 26.1 Prior to the detailed evaluation, the purchaser will determine the substantial responsiveness of each bid to the bidding documents. For purposes of this clause, a substantive responsive bid is one, which conforms to all terms and condition of the bidding documents without material deviations, reservations or omissions. A material deviation, reservation or omission is one that:
- (a) affects in any substantial way the scope, quality, or performance of the Goods and Related Services specified in the Contract; or
  - (b) Limits in any substantial way, inconsistent with the Bidding Documents, the Purchaser's rights or the Bidder's obligations under the Contract; or
  - (c) If rectified, would unfairly affect the competitive position of other bidders presenting substantially responsive bids.
- 26.2 The purchasers' determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.
- 26.3 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 material deviation, reservation or omission.

## **27. Non-Conformity, Error and Omission**

- 27.1 Provided that a Bid is substantially responsive, the Purchaser may waive any non-conformities or omissions in the Bid that do not constitute a material deviation.
- 27.2 Provided that a bid is substantially responsive, the Purchaser may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the bid related to documentation requirements. Such omission shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.
- 27.3 Provided that the Bid is substantially responsive, the Purchaser shall correct arithmetical errors on the following basis:
- (a) if there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of the Purchaser there is an obvious misplacement of the decimal point in the unit price, in which

case the line item total as quoted shall govern and the unit price shall be corrected;

- (b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
- (c) if there is a discrepancy between words and figures, the higher of the two would be taken as the bid price, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.

**27.3** If the Bidder that submitted the lowest evaluated Bid does not accept the correction of errors, its Bid shall be disqualified and its Bid Security may be forfeited.

## **28. Examination of Terms & Conditions, Technical Evaluation**

28.1 The Purchaser shall examine the Bid to confirm that all terms and conditions specified in the **GCC** and the **SCC** have been accepted by the Bidder without any material deviation or reservation.

28.2 The Purchaser shall evaluate the technical aspects of the Bid submitted in accordance with ITB Clause 14, to confirm that all requirements specified in Schedule of Requirements and Technical Specifications of the Bidding Documents have been met without any material deviation or reservation.

28.3 If, after the examination of the terms and conditions and the technical evaluation, the Purchaser determines that the Bid is not substantially responsive in accordance with ITB Clause 26, it shall reject the Bid.

## **29. Conversion to Single Currency**

29.1 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 on the date of bid opening .

## **30. Evaluation and comparison of bids**

30.1 The Purchaser shall evaluate each bid that has been determined, up to this stage of the evaluation, to be substantially responsive.

30.2 To evaluate a Bid, the Purchaser shall only use all the factors, methodologies and criteria defined below. No other criteria or methodology shall be permitted.

30.3 The bids shall be evaluated on the following basis which shall be arrived as under:

### **For goods being offered from India.**

- (i) The price of the goods quoted ex-works including all 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) Charges for inland transportation, insurance and other local services required for delivering the goods at the desired destination.
- (iv) The installation, commissioning and training charges, if any.

### **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 cost of transportation till Trivandrum Airport i.e., CIP cost.
- (iii) The agency commission etc., if any.
- (iv) The installation, commissioning and training charges, if any.

30.4 The comparison between the indigenous and the foreign offers shall be made on FOR destination basis and CIP basis respectively including the installation, commissioning and training charges. If comparison is to be made for indigenous and foreign offers together the delivery cost at NIIST would be taken into consideration. However, the CIP offer of a foreign firm will be loaded by 2% of the total cost and customs duty as applicable.

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

30.5 The insurance and freight charges being obtained by the bidder is purely for the purpose of academic interest and for evaluation. The foreign contracts shall normally be placed on FOB / FCA basis, at the discretion of the purchaser.

30.6 Wherever the price quoted on FOB/FCA and CIF/CIP basis are the same, the Contract would be made on CIF / CIP basis only.

### **31. Contacting the Purchaser**

31.1 Subject to Clause 24, 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.

31.2 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.

### **32. Post qualification**

32.1 In the absence of pre-qualification, the Purchaser will determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated responsive bid is qualified to perform the contract satisfactorily, in accordance with the criteria listed in ITB Clause 13.

32.2 The determination will take into account the eligibility criteria listed in the bidding documents and will be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, as well as such other information as the Purchaser deems necessary and appropriate.

32.3 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.

## **F- Award Of Contract**

### **33 Negotiations**

33.1 There shall not be any negotiation normally. Negotiations, if at all, shall be an exception and only in the case of items with limited source of supply. Negotiations shall be held with the lowest evaluated responsive bidder. Counter offers tantamount to negotiations and shall be treated at par with negotiations.

**34. Award Criteria**

- 34.1 Subject to ITB Clause 35 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 the lowest evaluated bid, provided further that the Bidder is determined to be qualified to perform the contract satisfactorily.

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

- 35.1 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.

**36. Notification of Award**

- 36.1 Prior to the expiration of the period of bid validity, the Purchaser will notify the successful bidder in writing by registered letter or fax or e mail that the bid has been accepted by way of a purchase order/contract.
- 36.2 Until a formal contract is prepared and executed, the notification of award should constitute a binding contract.
- 36.3 Upon the successful Bidder's furnishing of the signed Contract Form and performance security pursuant to ITB Clause 38, the Purchaser will promptly notify each unsuccessful Bidder and will discharge its bid security.

**37. Signing of Contract / Order Acceptance**

- 37.1 Promptly after notification, the Purchaser shall send the successful Bidder the Agreement / Purchase Order for signatures which should be returned within 21 days.
- 37.2 The successful bidder should submit Order acceptance within 15 days from the date of issue of purchase order, / submit the signed version of the contract failing which it shall be presumed that the vendor is not interested and his bid security is liable to be forfeited pursuant to clause 15.11 of ITB.

**38. Performance Security**

- 38.1 Within 21 days of receipt of the notification of Award / Purchase Order / Agreement, the Supplier shall furnish performance security in the amount specified in **SCC**, valid till 60 days after the warranty period. Alternatively, the PS may also be submitted at the time of release of final payment in cases where part payment is made against delivery & part on installation. The PS, where applicable, shall be submitted in advance for orders where full payment is to be made on Letter of Credit (LC) or on delivery. In this case, submission of PS at the time of negotiation of documents through Bank would be stipulated as a condition in the LC.
- 38.2 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.
- 38.3 The Performance Security shall be denominated in Indian Rupees for the offers received for supplies within India and denominated in the currency of the contract in the case of offers received for supply from foreign countries.

- 38.4 In the case of imports, the PS may be submitted either by the principal or by the Indian agent and, in the case of purchases from indigenous sources, the PS may be submitted by either the manufacturer or their dealer/bidder.
- 38.5 The Performance security shall be in one of the following forms:
- (a) A Bank guarantee issued by a Nationalized/Scheduled bank located in India or a bank located abroad in the form provided in the bidding documents.
  - Or
  - (b) A Banker's cheque or Account Payee demand draft in favor of the purchaser.
- 38.6 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**.
- 38.7 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.
- 38.8 The order confirmation should be received within 15 days from the date of notification of award/purchase order.
- 39. Purchaser's right to vary quantities at the time of award**
- 39.1 The Purchaser reserves the right at the time of award of Contract 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.
40. Representation of any with regard to the tendering process may be mailed to [spo@niist.res.in](mailto:spo@niist.res.in)

## CHAPTER 2

### A            GENERAL CONDITIONS OF CONTRACT

#### Table of Contents

Sl. No.	Clause	Page No.
1.	Definitions	17
2.	Contract Documents	17
3.	Fraud and Corruption	18
4.	Joint Venture, Consortium or Association	18
5.	Scope of Supply	18
6.	Suppliers' Responsibilities	18
7.	Contract price	18
8.	Copy Right	19
9.	Application	19
10.	Standards	19
11.	Use of Contract Documents and Information	19
12.	Patent Indemnity	19
13.	Performance Security	20
14.	Inspections and Tests	20
15.	Packing	21
16.	Delivery and Documents	22
17.	Insurance	22
18.	Transportation	22
19.	Incidental Services	23
20.	Spare Parts	23
21.	Warranty	23
22.	Terms of Payment	24
23.	Change Orders and Contract Amendments	24
24.	Assignment	24
25.	Subcontracts	25
26.	Extension of time	25
27.	Penalty Clause	25
28.	Termination for Default	25
29.	Force Majeure	26
30.	Termination for insolvency	26
31.	Termination for Convenience	26
32.	Settlement of Disputes	27
33.	Governing Language	27
34.	Applicable Law	28
35.	Notice	28
36.	Taxes and Duties	28
37.	Right to use Defective Goods	28
38.	Protection against Damage	28
39.	Site preparation and installation	28
40.	Pre-bid conference	29

## 1. Definitions

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

The following words and expressions shall have the meanings hereby assigned to them:

- (a) "Contract" means the Contract Agreement entered into between the Purchaser and the Supplier, together with the Contract Documents referred to therein, including all attachments, appendices, and all documents incorporated by reference therein.
- (b) "Contract Documents" means the documents listed in the Contract Agreement, including any amendments thereto.
- (c) "Contract Price" means the price payable to the Supplier as specified in the Contract Agreement, subject to such additions and adjustments thereto or deductions there from, as may be made pursuant to the Contract.
- (d) "Day" means calendar day.
- (e) "Completion" means the fulfillment of the Related Services by the Supplier in accordance with the terms and conditions set forth in the Contract.
- (f) "GCC" mean the General Conditions of Contract.
- (g) "Goods" means all of the commodities, raw material, machinery and equipment, and/or other materials that the Supplier is required to supply to the Purchaser under the Contract.
- (h) "Related Services" means the services incidental to the supply of the goods, such as transportation, insurance, installation, commissioning, training and initial maintenance and other such obligations of the Supplier under the Contract.
- (i) "SCC" means the Special Conditions of Contract.
- (j) "Subcontractor" means any natural person, private or government entity, or a combination of the above, to whom any part of the Goods to be supplied or execution of any part of the Related Services is subcontracted by the Supplier.
- (k) "Supplier" means the natural person, private or government entity, or a combination of the above, whose bid to perform the Contract has been accepted by the Purchaser and is named as such in the Contract Agreement.
- (l) The "Council" means the Council of Scientific & Industrial Research (CSIR), registered under the Societies Registration Act, 1860 of the Govt. of India having its registered office at 2, Rafi Marg, New Delhi-110001, India and the "Purchaser" means any of the constituent Laboratory/Institute of the Council situated at any designated place in India as specified in **SCC**.
- (m) "The final destination," where applicable, means the place named in the **SCC**.

## 2. Contract Documents

2.1 Subject to the order of precedence set forth in the Contract Agreement, all documents forming the Contract (and all parts thereof) are intended to be correlative, complementary, and mutually explanatory. The Contract Agreement shall be read as a whole.

### **3. Fraud and Corruption**

- 3.1 The purchaser requires that bidders, suppliers, contractors and consultants, if any, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuit of this policy,
- (a) The terms set forth below are defined as follows:
    - (i) "Corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the procurement process or in contract execution;
    - (ii) "Fraudulent practice" means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract;
    - (iii) "Collusive practice" means a scheme of arrangement between two or more bidders, with or without the knowledge of the Borrower, designed to establish bid prices at artificial, noncompetitive levels; and
    - (iv) "Coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the procurement process or affect the execution of a contract;
  - (b) the purchaser will reject a proposal for award if it determines that the Bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for the Contract in question;

### **4. Joint Venture, Consortium or Association**

- 4.1 If the Supplier is a joint venture, consortium, or association, all of the parties shall be jointly and severally liable to the Purchaser for the fulfillment of the provisions of the Contract and shall designate one party to act as a leader with authority to bind the joint venture, consortium, or association. The composition or the constitution of the joint venture, consortium, or association shall not be altered without the prior consent of the Purchaser.

### **5. Scope of Supply**

- 5.1 The Goods and Related Services to be supplied shall be as specified in chapter 3.

### **6. Suppliers' Responsibilities**

- 6.1 The Supplier shall supply all the Goods and Related Services included in the Scope of Supply in accordance with Scope of Supply Clause of the GCC, and the Delivery and Completion Schedule, as per GCC Clause relating to delivery and document.

### **4. Contract price**

- 7.1 Prices charged by the Supplier for the Goods supplied and the Related Services performed under the Contract shall not vary from the prices quoted by the Supplier in its bid.

## **5. Copy Right**

- 8.1 The copyright in all drawings, documents, and other materials containing data and information furnished to the Purchaser by the Supplier herein shall remain vested in the Supplier, or, if they are furnished to the Purchaser directly or through the Supplier by any third party, including suppliers of materials, the copyright in such materials shall remain vested in such third party

## **9. Application**

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

## **10. Standards**

- 10.1 The Goods supplied and services rendered under this Contract shall conform to the standards mentioned in the Technical Specifications and Schedule of Requirements, 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.

## **11. Use of Contract Documents and Information**

- 11.1 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.
- 11.2 The Supplier shall not, without the Purchaser's prior written consent, make use of any document or information enumerated above except for purposes of performing the Contract.
- 11.3 Any document, other than the Contract itself, enumerated above 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.

## **12. Patent Indemnity**

- 12.1 The Supplier shall, subject to the Purchaser's compliance with GCC Sub-Clause 12.2, indemnify and hold harmless the Purchaser and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Purchaser may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract by reason of:
- (a) the installation of the Goods by the Supplier or the use of the Goods in India; and
  - (b) The sale in any country of the products produced by the Goods.
- 12.2 If any proceedings are brought or any claim is made against the Purchaser, the Purchaser shall promptly give the Supplier a notice thereof, and the Supplier may at its own expense and in the Purchaser's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

### 13. Performance Security

- 13.1 Within 21 days of receipt of the notification of Award / Purchase Order / Agreement, the Supplier shall furnish performance security in the amount specified in **SCC**, valid till 60 days after the warranty period. Alternatively, the PS may also be submitted at the time of release of final payment in cases where part payment is made against delivery & part on installation. The PS, where applicable, shall be submitted in advance for orders where full payment is to be made on Letter of Credit (LC) or on delivery. In this case, submission of PS at the time of negotiation of documents through Bank would be stipulated as a condition in the LC.
- 13.2 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.
- 13.3 The Performance Security shall be denominated in Indian Rupees for the offers received for supplies within India and denominated in the currency of the contract in the case of offers received for supply from foreign countries.
- 13.4 In the case of imports, the PS may be submitted either by the principal or by the Indian agent and, in the case of purchases from indigenous sources, the PS may be submitted by either the manufacturer or their dealer/bidder.
- 13.5 The Performance security shall be in one of the following forms:
- (a) A Bank guarantee issued by a Nationalized/Scheduled bank located in India or a bank located abroad in the form provided in the bidding documents.
  - Or
  - (b) A Banker's cheque or Account Payee demand draft in favor of the purchaser.
- 13.6 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**.
- 13.7 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.
- 13.8 The order confirmation should be received within 15 days from the date of notification of award/purchase order.

### 14. Inspections and Tests

- 14.1 The Supplier shall at its own expense and at no cost to the Purchaser carry out all such tests and/or inspections of the Goods and Related Services as are specified in the **SCC** or as discussed during the course of finalizing the contract.
- 14.2 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. The Technical Specifications and SCC shall specify what inspections and tests 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.



- 14.3 The inspections and tests may be conducted on the premises of the Supplier or its subcontractor(s), at the point of delivery and/or at the Goods final destination. If conducted on the premises of the Supplier or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production data - shall be furnished to the inspectors at no charge to the Purchaser.
- 14.4 Whenever the Supplier is ready to carry out any such test and inspection, it shall give a reasonable advance notice, including the place and time, to the Purchaser. The Supplier shall obtain from any relevant third party or manufacturer any necessary permission or consent to enable the Purchaser or its designated representative to attend the test and/or inspection.
- 14.5 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.
- 14.6 The Purchaser's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival at final destination 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.
- 14.7 The Supplier shall provide the Purchaser with a report of the results of any such test and/or inspection.
- 14.8 With a view to ensure that claims on insurance companies, if any, are lodged in time, the bidders and /or the Indian agent, if any, shall be responsible for follow up with their principals for ascertaining the dispatch details and informing the same to the Purchaser and he shall also liaise with the Purchaser to ascertain the arrival of the consignment after customs clearance so that immediately thereafter in his presence the consignment could be opened and the insurance claim be lodged, if required, without any loss of time. Any delay on the part of the bidder/ Indian Agent would be viewed seriously and he shall be directly responsible for any loss sustained by the purchaser on the event of the delay.

## 15. Packing

- 15.1 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 price schedule form/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. **Since Air cargo handling is not of the highest order in India, we prefer to have wooden crating with adequate cushion inside for transportation of any goods.**
- 15.2 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.

## 16. Delivery and Documents

- 16.1 Delivery of the Goods and completion and related services shall be made by the Supplier in accordance with the terms specified by the Purchaser in the contract. The details of shipping and/or other documents to be furnished by the supplier are specified in **SCC**.
- 16.2 The terms FOB, FCA, CIF, CIP etc shall be governed by the rules prescribed in the current edition of the Inco terms published by the International Chambers of Commerce, Paris.
- 16.3 The mode of transportation shall be as specified in **SCC**.

## 17. Insurance

- 17.1 Should the purchaser elect to buy on CIF/CIP basis, the Goods supplied under the Contract shall be fully insured in Indian Rupees against any loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in **SCC**.
- 17.2 Where delivery of the goods is required by the purchaser on CIF or CIP basis the supplier shall arrange and pay for Cargo Insurance, naming the purchaser as beneficiary and initiate & pursue claims till settlement, on the event of any loss or damage.
- 17.3 Where delivery is on FOB or FCA basis, insurance would be the responsibility of the purchaser.
- 17.4 With a view to ensure that claims on insurance companies, if any, are lodged in time, the bidders and /or the Indian agent, if any, shall be responsible for follow up with their principals for ascertaining the dispatch details and informing the same to the Purchaser and he shall also liaise with the Purchaser to ascertain the arrival of the consignment after customs clearance so that immediately thereafter in his presence the consignment could be opened and the insurance claim be lodged, if required, without any loss of time. Any delay on the part of the bidder/Indian Agent would be viewed seriously and he shall be directly responsible for any loss sustained by the purchaser on the event of the delay.

## 18. Transportation

- 18.1 Where the Supplier is required under the Contract to deliver the Goods FOB, transport of the Goods, up to and including the point of putting the Goods on board the vessel at the specified port of loading, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract price. Where the Supplier is required under the Contract to deliver the Goods FCA, transport of the Goods and delivery into the custody of the carrier at the place named by the Purchaser or other agreed point shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract price.
- 18.2 Where the Supplier is required under the Contract to deliver the Goods CIF or CIP, transport of the Goods to the port of destination or such other named place of destination in the Purchaser's country, as shall be specified in the Contract, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price.

- 18.3 In the case of supplies from within India, where the Supplier is required under the Contract to transport the Goods to a specified destination in India, defined as the Final Destination, transport to such destination, including insurance and storage, as specified in the Contract, shall be arranged by the Supplier, and the related costs shall be included in the Contract Price.

## 19. Incidental Services

- 19.1 The supplier may be required to provide any or all of the services, as discussed during the course of finalizing the contract.

## 20. Spare Parts

- 20.1 The Supplier shall 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:
    - (i) Advance notification to the Purchaser of the pending termination, in sufficient time to permit the Purchaser to procure needed requirements; and
    - (ii) Following such termination, furnishing at no cost to the Purchaser, the blueprints, drawings and specifications of the spare parts, if requested.

## 21. Warranty

- 21.1 The Supplier warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.
- 21.2 The Supplier further warrants that the Goods shall be free from defects arising from any act or omission of the Supplier or arising from design, materials, and workmanship, under normal use in the conditions prevailing in India.
- 21.3 Unless otherwise specified in the **SCC**, the warranty shall remain valid for twelve (12) months 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 **SCC**, or for eighteen (18) months after the date of shipment from the port or place of loading in the country of origin, whichever period concludes earlier.
- 21.4 The Purchaser shall give notice to the Supplier stating the nature of any such defects together with all available evidence thereof, promptly following the discovery thereof. The Purchaser shall afford all reasonable opportunity for the Supplier to inspect such defects.
- 21.5 Upon receipt of such notice, the Supplier shall, within a reasonable period of time expeditiously repair or replace the defective Goods or parts thereof, at no cost to the Purchaser.

21.6 If having been notified, the Supplier fails to remedy the defect within a reasonable period of time; the Purchaser may proceed to take within a reasonable period such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.

## **22. Terms of Payment**

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

22.2 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, Acceptance Certificate and by documents, submitted pursuant to Delivery and document Clause of the GCC and upon fulfillment of other obligations stipulated in the contract.

22.3 Payments shall be made promptly by the Purchaser but in no case later than thirty (30) days after submission of the invoice or claim by the Supplier.

22.4 Payment shall be made in currency as indicated in the contract.

## **23. Change Orders and Contract Amendments.**

23.1 The Purchaser may at any time, by written order given to the Supplier pursuant to Clause on Notices of the **GCC** 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.

23.2 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.

23.3 No variation or modification in the terms of the contract shall be made except by written amendment signed by the parties.

## **24. Assignment**

24.1 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.

**25. Subcontracts**

- 25.1 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 the original bid or later, shall not relieve the Supplier from any liability or duties or obligation under the Contract.

**26. Extension of time.**

- 26.1 Delivery of the Goods and performance of the Services shall be made by the Supplier in accordance with the time schedule specified in the contract.
- 26.2 If at any time during performance of the Contract, the Supplier or its sub-contractor(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). 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.
- 26.3 Except as provided under the Force Majeure clause of the **GCC**, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of penalty pursuant to Penalty Clause of the **GCC** unless an extension of time is agreed upon pursuant to above clause without the application of penalty clause.

**27. Penalty clause**

- 27.1 Subject to **GCC** Clause on Force Majeure, 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 0.5 percent 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 10 Percent. Once the maximum is reached, the Purchaser may consider termination of the Contract pursuant to **GCC** Clause on Termination for Default.

**28. Termination for Default**

- 28.1 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 contract, or within any extension thereof granted by the Purchaser pursuant to **GCC** Clause on Extension of Time; 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 or collusive or coercive practices as defined in **GCC** Clause on Fraud or Corruption in competing for or in executing the Contract.

- 28.2 In the event the purchaser terminates the contract in whole or in part, he may take recourse to any one or more of the following action:
- a) The Performance Security is to be forfeited;
  - b) The purchaser may procure, upon such terms and in such manner as it deems appropriate, stores similar to those undelivered, and the supplier shall be liable for all available actions against it in terms of the contract.
  - c) However, the supplier shall continue to perform the contract to the extent not terminated.

## **29. Force Majeure**

29.1 Notwithstanding the provisions of GCC Clauses relating to extension of time, penalty and Termination for Default 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.

29.2 For purposes of this Clause, "Force Majeure" means an event or situation beyond the control of the Supplier that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Supplier. Such events may include, but not be limited to, acts of the Purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.

29.3 If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof within 21 days of its occurrence. 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.

29.4 If the performance in whole or in part or any obligations under the contract is prevented or delayed by any reason of force majeure for a period exceeding 60 days, either party may at its option terminate the contract without any financial repercussions on either side.

## **30. Termination for Insolvency**

30.1 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.

## **31. Termination for Convenience**

31.1 The Purchaser, by written notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.

31.2 The Goods that are complete and ready for shipment within 30 days after the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the Contract terms and prices. For the remaining Goods, the Purchaser may elect:

- (a) To have any portion completed and delivered at the Contract terms and prices;  
and/or

- (b) To cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and for materials and parts previously procured by the Supplier.

### **32. Settlement of Disputes**

32.1 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.

32.2 If, after twenty-one (21) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the Purchaser or the Supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given. Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be finally settled by arbitration. Arbitration may be commenced prior to or after delivery of the Goods under the Contract. .

32.3 The dispute settlement mechanism/arbitration proceedings shall be concluded as under:

- (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 Director General, Council of Scientific & Industrial Research 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.

32.4 The venue of the arbitration shall be the place from where the purchase order/contract is issued.

32.5 Notwithstanding any reference to arbitration herein,  
 (a) the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and  
 (b) the Purchaser shall pay the Supplier any monies due the Supplier.

### **33. Governing Language**

33.1 The contract shall be written in English language which shall govern its interpretation. All correspondence and other documents pertaining to the Contract, which are exchanged by the parties, shall be written in the English language only.

**34. Applicable Law**

- 34.1 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**.

**35. Notices**

- 35.1 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**.
- 35.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.

**36. Taxes and Duties**

- 36.1 For goods manufactured outside India, the Supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside India.
- 36.2 For goods Manufactured within India, the Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred till its final manufacture/production.
- 36.3 If any tax exemptions, reductions, allowances or privileges may be available to the Supplier in India, the Purchaser shall make its best efforts to enable the Supplier to benefit from any such tax savings to the maximum allowable extent.

**37. Right to use Defective Goods**

- 37.1 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.

**38. Protection against Damage**

- 38.1 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:

- a) Voltage 230 volts – Single phase/ 415 V 3 phase ( $\pm 10\%$ )
- b) Frequency 50 Hz. ( $\pm 10\%$ )

**39. Site preparation and installation**

The Purchaser is solely responsible for the construction of the equipment sites in compliance with the technical and environmental specifications defined by the Supplier. The Purchaser will designate the installation sites before the scheduled installation date to allow the Supplier to perform a site inspection to verify the appropriateness of the sites before the installation of the Equipment, if required. The supplier shall inform the purchaser about the site preparation, if any, needed for installation, of the goods at the purchaser's site immediately after notification of Award / Purchase Order / Agreement.



40. A Pre-bid conference will be held on **28<sup>TH</sup> November 2014 at 1100 hrs(IST)** in our Committee Room. All interested bidders are requested to attend. Modification if any in the Tender document after the Pre-bid Conference would be hosted on the website only.

(i) **SPECIAL CONDITIONS OF CONTRACT**

**Special conditions of contract (SCC)**

The following Special Conditions of Contract (SCC) shall supplement and / or amend the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions herein shall prevail over those in the GCC.

<b>GCC 1.1(l)</b>	The Purchaser is: The Director, National Institute for Interdisciplinary Science & Technology, Trivandrum.
<b>GCC 1.1 (m)</b>	The Final Destination is: National Institute for Interdisciplinary Science & Technology, Trivandrum. Industrial Estate, Pappanamcode, Trivandrum- 695019 (Kerala), India
<b>GCC 13.1</b>	The amount of the Performance Security shall be: 10 % of the contract value
<b>GCC 14.1</b>	<p>The Inspection and Tests prior to shipment of Goods and at final acceptance are as follows :</p> <p>After the goods are manufactured and assembled, inspection and testing of the goods shall be carried out at the supplier's plant by the supplier, prior to shipment to check whether the goods are in conformity with the technical specifications. Manufacturer's test certificate with data sheet shall be issued to this effect and submit along with the delivery documents. The purchaser reserves the options to be present at the supplier's premises during such inspection and testing.</p> <p>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.</p> <p>In the event of the ordered item failing to pass the acceptance test, a period not exceeding two weeks 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.</p>

	<p>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.</p> <p>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 Purchase to operate, maintain, adjust and repair all parts of the works as stated in the specifications.</p> <p>The Manuals and Drawings shall be in the ruling language (English) and in such form and numbers as stated in the Contract.</p> <p>Unless and otherwise agreed, the goods and 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.</p> <p>On successful completion of acceptability test, receipt of deliverables, etc. and after the Purchaser is satisfied with the working of the equipment, the acceptance certificate signed by the Supplier and the representative of the Purchaser will be issued. The date on which such certificate is signed shall be deemed to be the date of successful commissioning of the equipment.</p>
<p><b>GCC 16.1</b></p>	<p>Details of Shipping and other Documents to be furnished by the Supplier are</p> <p><b>(i) For Goods being offered from India</b></p> <p>Within 24 hours of dispatch, the supplier shall notify the purchaser the complete details of dispatch and also supply following documents by registered post / speed post and copies thereof by FAX. <b>0471-2491895/2491712</b> or mail <b>spo@niist.res.in</b></p> <p>(a) Two copies of Supplier's Invoice indicating, <i>inter-alia</i> description and specification of the goods, quantity, unit price, total value;</p> <p>(b) Packing list;</p> <p>(c) Certificate of country of origin;</p> <p>(d) Insurance certificate, if required under the contract;</p> <p>(e) Railway receipt/Consignment note;</p> <p>(f) Manufacturer's guarantee certificate and in-house inspection certificate;</p> <p>(g) Inspection certificate issued by purchaser's inspector, if any and</p> <p>(h) Any other document(s) as and when required in terms of the contract.</p> <p><b>Note:</b></p> <p>1. The nomenclature used for the item description in the invoices(s), packing list(s) and the delivery note(s) etc. should be identical to that used in the contract. The dispatch particulars including the name of the transporter should also be mentioned in the Invoice(s)</p> <p>2. The above documents should be received by the Purchaser before arrival of the Goods and, if not received, the Supplier will be responsible for any consequent expenses</p>

	<p><b>(ii) For Goods being offered from abroad</b></p> <p>Within 24 hours of dispatch, the supplier shall notify the purchaser the complete details of dispatch and also supply following documents by Registered Post/courier and copies thereof by FAX. <b>0471-2491895/2491712</b> or mail <b>spo@niist.res.in</b></p> <p>a) Two copies of supplier's Invoice giving full details of the goods including quantity, value, etc.;</p> <p>b) Packing list;</p> <p>c) Certificate of country of origin;</p> <p>d) Manufacturer's guarantee and Inspection certificate;</p> <p>e) Inspection certificate issued by the Purchaser's Inspector, if any;</p> <p>f) Insurance Certificate, if required under the contract;</p> <p>g) Name of the Vessel/Carrier;</p> <p>h) Original bill of Lading/Airway Bill;</p> <p>i) Port of Loading;</p> <p>j) Date of Shipment;</p> <p>k) Port of Discharge &amp; expected date of arrival of goods and</p> <p>l) Any other document(s) as and when required in terms of the contract.</p> <p><b>Note:</b></p> <p>1. The nomenclature used for the item description in the invoices(s), packing list(s) and the delivery note(s) etc. should be identical to that used in the contract. The dispatch particulars including the name of the transporter should also be mentioned in the Invoice(s)</p> <p>2. The above documents should be received by the Purchaser before arrival of the Goods and, if not received, the Supplier will be responsible for any consequent expenses</p>
<b>GCC 16.3</b>	<p>In case of supplies from within India, the mode of transportation shall be by Air/Rail/Road.</p> <p>In case of supplies from abroad, the mode of transportation shall be by Air/ocean.</p>
<b>GCC 17.1</b>	<p>The Insurance shall be for an amount equal to 110% of the CIF or CIP value of the contract from within "warehouse to warehouse (final destination)" on "all risk basis" including strikes, riots and civil commotion.</p>

22.1	<p>The method and conditions of payment to be made to the Supplier under this Contract shall be as follows:</p> <p><b>Payment for Goods and services offered from abroad:</b></p> <p>Payment of foreign currency portion shall be made in the currency of contract in the following manner:</p> <p>i. <b>On Shipment:</b> Ninety (90) percent of the Contract Price of the Goods shipped shall be paid through irrevocable letter of credit opened in favor of the Supplier in a bank in its country, upon submission of documents specified in GCC Clause 16.1.</p> <p>(ii) <b>On Acceptance:</b> Ten (10) percent of the Contract Price of Goods received shall be paid within thirty (30) days of receipt of the Goods and successful installation &amp; commissioning upon submission of claim supported by the acceptance certificate issued by the Purchaser along with the Performance security, if any.</p> <p>The L/C will be confirmed at the suppliers cost, if requested specifically by the supplier. If L/C is requested to be extended/ reinstated for reasons not attributable to the purchaser, the charges thereof would be to the suppliers' account. Payment of local currency portion shall be made in Indian Rupees within thirty (30) days of presentation of claim supported by a certificate from the Purchaser declaring that the Goods have been delivered and that all other contracted Services have been performed. The LC for 100% value of the contract shall be established after deducting the agency commission payable, if any to the Indian agent from the FOB/FCA value. A LC for 100% value can be established provided 10% Performance Bank Guarantee is submitted before the establishment of LC.</p> <p><b>Payment for Goods and Services offered from India:</b></p> <p>Payment for Goods and Services supplied from within India shall be made in Indian Rupees, as follows:</p> <p>(i) <b>On shipment :</b> Fifty (50) percent of the Contract Price shall be paid on receipt of the Goods and upon submission of the documents specified in GCC Clause 16.1</p> <p>(ii) <b>On Acceptance:</b> The remaining fifty (50) percent of the Contract value shall be paid to the Supplier within thirty (30) days after the date of the acceptance certificate issued by the Purchaser subject to submission of performance security, if any.</p>
GCC 34.1	The place of jurisdiction is Trivandrum, Kerala India
GCC 35.1	<p>For <b>notices</b>, the Purchaser's address is</p> <p>Attention: The Stores and Purchase Officer</p> <p><b>The National Institute for Interdisciplinary Science and Technology, Industrial Estate, Pappanamcode, Trivandrum -695019, (Kerala), India.</b></p> <p><b>Telephone: 0471-2491895/2515239/256/378/2535511/2535510</b></p> <p><b>Facsimile number: 0471-2491895.</b></p> <p><b>e-mail:spo@niist.res.in</b></p>

**hapter 3****Price Schedule Forms****Table of Contents**

<b>Sl. No.</b>	<b>Clause</b>	<b>Page No.</b>
1.	Price schedule for Goods being Offered from abroad	34
2.	Price schedule for Goods offered from India	35

**PRICE SCHEDULE FOR GOODS BEING OFFERED FROM ABROAD**

Name of the Bidder \_\_\_\_\_  
No. \_\_\_\_\_

**TENDER**

1	2	3	4	5	6*		7*		8*		9*		10	11	12
Sl. No.	Item Description	Country of origin	Unit	Quantity	Unit price		Total price (5x6)		Charges for Insurance & transportation to port//place of destination	Total price (7+8)		Indian Agents Commission as a percent of FOB /FCA price included in the Quoted price	Appx. Shipment weight and volume.	Appx. Shipment weight and Volume	
					FOB (named port of shipment)	FCA (named place of delivery)	FOB (named port of shipment)	FCA (named place of delivery)		CIF	CIP				
									Ocean	Air					

Note:.

- (a) Indian agents name & address \_\_\_\_\_  
 (b) Installation and commissioning charges, if any \_\_\_\_\_  
 (c) The Indian agent's commission shall be paid in Indian Rs. only based on the Exchange rate prevailing on the date of negotiation of documents in Accordance with clause 22.1 of GCC.  
 (d) The cost of optional items shall be indicated separately.

Total Bid price in foreign currency \_\_\_\_\_  
in words.

Signature of Bidder \_\_\_\_\_

Name \_\_\_\_\_

Business Address \_\_\_\_\_

**PRICE SCHEDULE FOR GOODS BEING OFFERED FROM INDIA**

Name of the Bidder \_\_\_\_\_

Tender No. \_\_\_\_\_

1	2	3	4	5	6	7	8	9	10	11
Sl. No.	Item Description	Country of origin	Unit	Quantity	Ex-Works.,Ex-warehouse,,Ex-show room off the shelf price (inclusive of all taxes already paid)	Total price Ex-Works.,Ex-warehouse,,Ex-show room off the shelf price (inclusive of all taxes already paid) 5x6	VAT & other taxes like excise duty payable, if contract is awarded	Packing & forwarding up to station of dispatch	Charges for inland transportation, insurance to ultimate destination i.e. NIIST, Trivandrum	Installation, Commissioning And training Charges, If any

Total Bid price in foreign currency \_\_\_\_\_  
in words.

Signature of Bidder \_\_\_\_\_

Name \_\_\_\_\_

Business Address \_\_\_\_\_

Note :

- (a) The cost of optional items shall be indicated separately.

## Chapter 4

### Qualification requirements

- (a) The Bidder should be a manufacturer/authorized representative of a manufacturer 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.
- (b) The Bidder should furnish the information on all past supplies and satisfactory performance in the proforma (Performance Statement Form)
- (c) Bidders shall invariably furnish documentary evidence (client's certificate) in support of the satisfactory operation of the equipment.
- (d) Details of Service Centers and information on service support facilities that would be provided after the warranty period (in the Service Support Form).
- (e) 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 as per ITB 13.2(c).
- (f) 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 of the Govt. of India are registered with DGS&D.
- (g) **To maintain sanctity of tendering system one Indian agent cannot represent two different foreign principals in one tender.**



## Chapter 5

### Contract form

Contract No. \_\_\_\_\_ Date: \_\_\_\_\_

THIS CONTRACT AGREEMENT is made

the [*insert: number*] day of [*insert: month*], [*insert: year*].

BETWEEN

(1) The Council of Scientific & Industrial Research registered under the Societies Registration Act 1860 of the Government of India having its registered office at 2, Rafi Marg, New Delhi-110001, India represented by The Director, The National Institute for Interdisciplinary Science and Technology, Industrial Estate, Pappanamcode, Trivandrum -695019, (Kerala), India. (hereinafter called “the Purchaser”), 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”).

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 Council of Scientific & Industrial Research

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]*

**Chapter 6**

## Other standard forms

**Table of Contents**

<b>Sl. No.</b>	<b>Name</b>	<b>Page No.</b>
1.	Manufacturers' Authorization Form	40
2.	Bid Security Form	41
3.	Performance Statement Form	42
4.	Deviation Statement Form	43
5.	Service Support Detail Form	44
6.	Bid Form	45
7.	Performance Security Form	47
8.	Acceptance Certificate Form	48

**MANUFACTURERS' AUTHORIZATION FORM**

*[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer.]*

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

To: *[insert complete name and address of Purchaser]*

WHEREAS

We *[insert complete name of Manufacturer]*, who are official manufacturers of *[insert type of goods manufactured]*, having factories at *[insert full address of Manufacturer's factories]*, do hereby authorize *[insert complete name of Bidder]* to submit a bid the purpose of which is to provide the following Goods, manufactured by us *[insert name and or brief description of the Goods]*, and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with Clause 21 of the General Conditions of Contract, with respect to the Goods offered by the above firm.

Signed: *[insert signature(s) of authorized representative(s) of the Manufacturer]*

Name: *[insert complete name(s) of authorized representative(s) of the Manufacturer]*

Title: *[insert title]*

Duly authorized to sign this Authorization on behalf of: *[insert complete name of Bidder]*

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

**BID SECURITY FORM**

Whereas \_\_\_\_\_  
(hereinafter called the tenderer")

has submitted their offer dated \_\_\_\_\_  
for the supply of \_\_\_\_\_

(hereinafter called the tender") Against the purchaser's tender enquiry

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

KNOW ALL MEN by these presents that WE \_\_\_\_\_  
of \_\_\_\_\_ having our registered office at

\_\_\_\_\_ are bound unto \_\_\_\_\_

(hereinafter called the "Purchaser") In the sum of \_\_\_\_\_  
For which payment will 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 \_\_\_\_\_ 20\_\_\_\_\_.

THE CONDITIONS OF THIS OBLIGATION ARE:

- (1) If the tenderer withdraws or amends, impairs or derogates from the  
Tender in any respect within the period of validity of this tender.
- (2) If the tenderer having been notified of the acceptance of his tender by the  
Purchaser during the period of its validity:-
  - a) If the tenderer fails to furnish the Performance Security for the due Performance  
of the contract.
  - b) Fails or refuses to accept/execute the contract.

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 the two conditions, specifying the occurred condition or  
conditions.

This guarantee will remain in force up to and including 45 days after the period of tender  
validity and any demand in respect thereof should reach the Bank not later than the  
above date.

\_\_\_\_\_  
(Signature of the authorized officer of the Bank)

\_\_\_\_\_  
\_\_\_\_\_

Name and designation of the officer

Seal, name & address of the Bank and address of the Branch

**PERFORMANCE STATEMENT FORM**  
**(For a period of last 3 years)**

Name of the Firm.....

Order Placed by (full address of Purchaser)	Order No. and date	Description and quantity of ordered equipment	Value of order	Date of completion of delivery as per contract	Date of actual completion of delivery.	Remarks indicating reasons for late delivery, if any	Has the equipment been installed satisfactorily? (Attach a certificate from the purchaser/Consignee)	Contact person along with Telephone No., FAX No. and e-mail address

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

Place :

Date :

**DEVIATION STATEMENT FORM**

- 1) The following are the particulars of deviations from the requirements of the tender specifications:

CLAUSE	DEVIATION	REMARKS (INCLUDING JUSTIFICATION)

Place:

Date:

Signature and  
seal of the

Manufacturer/Bidder

NOTE:

- 1) Where there is no deviation, the statement should be returned duly signed with an endorsement indicating "No Deviations".

**SERVICE SUPPORT DETAIL FORM**

Sl. No.	Nature of training imparted	List of similar type equipments serviced in the past 3 years	Address, Telephone Nos. , Fax Nos. and e mail address

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: *[insert complete name of Purchaser]*

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 13 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]*

Name of Recipient	Address	Reason	Amount
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

(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]*

**PERFORMANCE SECURITY FORM**

To

(Name of Purchaser)

WHEREAS \_\_\_\_\_

(name and address of the supplier) ((hereinafter called "the Supplier")  
has undertaken, in pursuance of contract No. \_\_\_\_\_ dated \_\_\_\_\_  
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 scheduled commercial recognized by you for the sum specified therein as security for compliance with its obligations in accordance with the contract;

AND WHEREAS we have agreed to give the supplier such a bank guarantee;

NOW 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 limits 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.

We hereby waive the necessity of your demanding the said debt from the supplier before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until the \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
(Signature of the authorized officer of the Bank)

\_\_\_\_\_  
Name and designation of the Officer

\_\_\_\_\_  
Seal, name & address of the Bank and address of the Branch.

### Acceptance certificate form

No.

Dated:

M/s \_\_\_\_\_

 \_\_\_\_\_  
 \_\_\_\_\_

Sub: Certificate of commissioning of equipment (Computer/Server, etc.)

1. This is to certify that the equipment as detailed below has/have been received in good condition along with all the standard and special accessories (subject to remarks in Para 2). The same has been installed and commissioned.

- (a) Contract No. \_\_\_\_\_ Date \_\_\_\_\_
- (b) Description of the equipment \_\_\_\_\_
- (c) Name of the consignee \_\_\_\_\_
- (d) Scheduled date of delivery of the consignment to the Lab./Instts. \_\_\_\_\_
- (e) Actual date of receipt of consignment by the Lab./Instts. \_\_\_\_\_
- (f) Scheduled date for completion of installation/commissioning \_\_\_\_\_
- (g) Actual date of completion of installation/commissioning \_\_\_\_\_
- (h) Penalty for late delivery (at Lab./Instts. level) Rs. \_\_\_\_\_
- (i) Penalty for late installation (at Lab./Instts. level) Rs. \_\_\_\_\_

Details of accessories/items not yet supplied and recoveries to be made on that account:

Sl. No.	Description	Amount to be recovered
---------	-------------	------------------------

The acceptance test has been done to our entire satisfaction.

The supplier has fulfilled his contractual obligations satisfactorily

or

The supplier has failed to fulfill his contractual obligations with regard to the following:

- (a).....
- (b) .....
- (c).....
- (d).....

The amount of recovery on account of failure of the supplier to meet his contractual obligations is as indicated at Sr. No. 3.

For Supplier  
Signature.....

Name.....

Designation.....

Name of the firm.....

Date.....

For Purchaser (Indentor / End User)

Signature.....

Name.....

Designation.....

Name of the Lab./Instt.....

Date.....

## CHAPTER 7

### PUR/IMP/095/14

#### Technical specification for fully Motorized Inverted Fluorescence Microscope system with image analysis for live cell imaging

1. **Inverted frame:** Motorized Ergonomic Stand with inbuilt Z-focus drive with minimum step resolution of 10-15 nm or better. The system should have a dedicated external TFT/LCD touch screen capable of controlling all motorized functions of microscope including objectives. The system should have an IR based Laser/Led focus drift compensator for long term in focus time lapse imaging controlled by both touch screen panel and imaging software at all magnifications.
2. The Microscope Frame should be ready with a Right side Port for Simultaneous imaging for FRET studies.
3. **Transmitted Light system:** 12V100W Halogen Illumination with intensity control through touch panel and imaging software.
 

**Condenser:** Motorized universal condenser (suitable for all microscopy techniques such as Phase, DIC) with 6 to 7 slots. It should have phase rings for 10X, 20X, 40X and DIC prisms for 20X, 40X and 60X and 100X objectives.

**Eyepiece:** 10X with F.O.V. 22 or better eye pieces-2 nos.

**Nosepiece:** Six positions motorized revolving nosepiece with Slot for DIC Slider/analyser to accommodate objectives different magnifications.

**Stage:** Motorized X-Y Stage with controller and joystick having multiple holders to adapt. The motorized stage should be able hold CO2 Incubator with stage inserts for 35 mm plates, 96 well plates, and slide. The imaging software should have modules to drive the motorized stage and perform multi-well / multipoint imaging and mosaic imaging (Image stitching).

**Objectives:** High numerical aperture objectives suitable for bright field / fluorescence / DIC observation Plan fluorite 10X with phase, Plan fluor long working distance objective 20X phase with correction collar, long working distance Plan fluor objective 40X phase with correction collar & fluorescence, High NA Confocal grade plan apochromat objective 60X with oil (N.A 1.35 or higher UV-IR Corrected).

**Optional:** Plan Apochromat 100X with oil (N.A 1.40 or higher UV-IR Corrected)

**Fluorescence module:** Motorized fluorescence attachment with built in shutter and a minimum of 6-8 position filter cube slots for band pass (Excitation and Emission) interference fluorescent filters FITC/GFP (Ex 465-495, DM 505), TRITC/Rhodamine (Ex 540/25, DM 565) DAPI/Hoechst (Ex 340-380, DM 400) separate fluorescence filter for YFP, CFP and Cy5 applications should be quoted. Please quote for modules for 2 colour simultaneous imaging for CFP/YFP FRET pair and GFP/RFP FRET pair. Tripple band filter for DAPI/FITC/TRITC.

**Fluorescence Light Source:** Fluorescence Light source 120/130 watts metal halide/ Mercury lamp with 2000 hrs life time (quote 3 spare bulbs) with Light intensity control. The light source should be alignment free / precentered to minimize the human interference for alignment. The light source should be connected to the microscope with fiber (3m) to avoid direct heat transfer from the Mercury / metal halide lamp. The shutter and the attenuator for the light source be controlled and synchronized by imaging

software for time lapse and multi-channel imaging. It should also be controlled by touch screen and software.

4. **Camera:**

CCD camera, interline-transfer, progressive-scan device with micro lenses, 1392 x 1040 imaging array, 6.45 x 6.45- $\mu\text{m}$  pixels, 8.98 x 6.71mm imaging area (optically centered), System Gain better than 1 e-/ADU, Linear full well: 16,000 e-or better, Read noise less than 4.6 e-rms @10MHz, Less than 5.6 e-rms @20MHz, Digitizer type IEEE-1394a, 14 bits@20 MHz or 10 MHz (software selectable)

**CCD Temperature: -30°C (regulated) (Please provide literature such as brochure or website link as a proof)**

**Dark current:** less than 0.001e/p/s Quantum efficiency:>60%. Frame rates: 11frames/sec at full resolution with 1x1 binning and should be able to reach 104 frame/sec with ROI and binning.

5. **Software:** The imaging software should have an advance multi dimensional acquisition, camera control and controlling all function of motorized and coded functions of the microscope. It should have **automated count & measurement modules**, time lapse recording functions, automated five dimension imaging, automated multi-channel fluorescence capturing and merging, **fluorescence un mixing, co-localization**, wide Filed basic De-convolution software module, Online / real time deconvolution or deblur module. **Quote for 3D Blind deconvolution module and real time ratio imaging of two fluorescence colour (FRET by ratio) in option.** The software should have function of automated multi point / multi-well time Lapse imaging. The software should be able to I/O trigger capability for future upgradation. Optional: Software for offline analysis.
6. **Branded Data processing unit with a minimum configuration of Xenon processor with 8 GB RAM, DVD Writer, 1TB GB or higher HDD, 1280x1024 (min.1024x768) monitor resolution with Graphic card with separate graphics memory. PCI Express x1. Compatible with half size or Low-profile PCIe board. Original Window 8 Operating System (64 Bit), Original Anti-Virus with CD, LCD Monitor 23-24 inches. UPS 2 KVA with 30 minutes back up. Computer display of the software should be sufficient enough to reflect the original optical resolution of image captured.**
7. **Twin monitors for display**
8. **Universal stage holder (CO2 Top stage Incubator):** Comprising of Incubating chamber with glass heated lid, thermal controller, automated CO2 mixer to use 100% CO2 and deliver 5% constant CO2 output with a heated humidifying Module. It requires atleast 35mm petri-dish plate, glass slide & 96 well plate adaptors, Air pump and adaptor for holding Incubator on motorized XY stage. Separate software for controlling all the above function of the incubator. The incubator should have multiple hole to accept the perfusion tubes. CO2. Universal adaptor for cylinders.
9. **Warranty – 5 Years.**

**PUR/IMP/096/14****Recycling Type Preparative HPLC****Specifications**

1. It should be able to separate otherwise inseparable mixtures by automatic repeated cycle of chromatography (i.e. by re-introducing the sample solution eluted from the column back into the column repeatedly)
2. Recycling system: Non-diffusion automatic recycler system
3. Compact size and minimum solvent usage is an essential criterion
4. Sample amount: milligram to gram without changing the column
5. Detectors: UV-visible detector with wide range, and refractive index detector
6. Solvent reservoir with at least 3-5 L capacity
7. Preparative Scale GPC columns (Minimum two types; one with an exclusion limit of molecular weight ~1000 and other with an exclusion limit of molecular weight ~5000)
8. Appropriate monitoring and recording systems (state of the art computer, software and printer)
9. Pump: With a flow rate in the range 0.1-50.0 ml/min
10. Multiple column holders
11. Warranty for 1 year (Additional warranty/AMC for 3 years should be quoted separately)
12. All essential accessories (pump, injector, columns, computer, software, various detectors) to set-up fully functional unit should be quoted
13. Spare parts (Pre-columns - 5 Nos., UV cell, solvent joint bottle, Teflon tubes, caps, connectors, column plugs, ferrules, nuts, needles, O rings) should be quoted as optional items
14. Power requirements should match Indian standards.

Users list and contact nos. of nearby Institutes/Universities should be given

**PUR/IMP/100/14****Technical Specifications for Analytical / Preparative HPLC****Instrument specifications:**

- Should be suitable for analytical and preparative applications.
- Should be suitable for purification of µg to mg quantities of compounds.

**Pump**

- Should be binary (or quaternary) system with at least 2 pumps.
- Should perform for analytical-semi preparative- preparative scale analysis and purification.
- Flow rate: 0.01 ml/min to 150 ml/min.
- pH range = 1.0 – 12.5 or better

**Photodiode Array Detector**

- Detector type: Diode array
- Light source : Deuterium (D2) and tungsten (W) lamps
- Multiple wavelength detector
- Bandwidth : Selectable/programmable 1.2 nm - 8nm
- Wavelength accuracy : ±1 nm; Wavelength precision : 0.1 nm
- Cell temperature-control range : +5°C to 50°C
- Flow cells suitable for analytical & preparative scales

**Refractive Index Detector (RID)**

- Type: Refractive Index Deflection Method
- RI range: 1.00-1.75
- Temperature control: +5 °C to 50 °C

**Columns**

The bidder should also quote for the following set of Reverse Phase, ion exchange, SEC columns and their guard columns

- 3 numbers of C18 column (5µm, 250 x 4.6 mm)
- 3 numbers of C18 column (5µm, 250 x 10 mm)
- Chiralcel OD-H-250 x 10mm x 5µm-semiprep/10µm column
- Chiralpak AD-H-250 x 10mm x 5µm-semiprep/ 10µm column
- ProntoSil, 250mm x 8.0mm x 250 x 5µm-semiprep, Bischoff column
- ProntoSil, 250mm x 4.0mm x 250 x 5µm-analytical, Bischoff column
- VP-ODS-C18 Column 150 x 4.6mm 5µm
- PRC-ODS-C18 Column 250 x 20mm 5µm
- Chiralcel OD-RH-150 X 4.6mm analytical column
- Chiralcel OJ-H 150 x 4.6mm analytical column



- Chiralcel OJ-H 250 x 10mm semi-prep column
- 2 numbers of size exclusion column (Gel filtration) for separating aggregates of size varying between 10-500 nm
- 10 numbers of guard columns for all above columns

#### **Thermostatted Column Compartment**

- Peltier cooling system/forced air circulation
- Temperature range: 10 °C to 85 °C or better
- Column capacity: Three columns or better

#### **Solvent Degasser (optional if required for the model)**

- Should be suitable for application with flow rate up to 10 mL/min for use with binary pumps

#### **Software, Computer & Printer**

- Should be compatible with windows operating system.
- Should be able to perform all standard and advance applications of HPLC both online and offline.
- It should be supplied with a Latest Configuration Dell/HP computer with a 22" flat screen monitor (Detailed specifications given separately) and a LaserJet printer (HP LaserJet Pro P1606dn Printer) and must be supported with HPLC software compatible, latest version of Licensed Windows Operating System (preferably Windows 7 Professional) and required software's. Company also should support the HPLC software with future updates free of cost.

#### **Warranty & General**

- The bidder should quote for accessories/service kit with necessary tubing (at least 25 meters) ferrules (pack of 100), plungers (at least 5 numbers), and loops of various volumes.
- The bidder should also quote for spares of all filters.
- Bidder should indicate the UPS requirements and include the supply of an online UPS system of at least 3KVA (branded item) to support the complete system as an optional item.
- The supplier should support the machine with 3 Year warranty and 2 Year AMC, for no additional cost. If the warranty required exceeds standard warranty offered free of cost, it should be included and quoted.
- The vendor must undertake to deliver and install the system at the shortest possible time after the placement of the purchase order and certify that every component supplied is brand new and not refurbished.
- Manuals / Circuit-Diagrams and Instruction Sheets: All the manuals including circuit diagrams and instruction must be supplied in English for the purpose of in house service engineer's reference.

- Pre-Installation requirement: Necessary pre-installation advice, bench and electrical requirements and other site essential details should be sent immediately after the placement of the order.
- Installation in India: List of Indian users of the quoted model of the equipment along with their complete contact details and date of supply of the instrument should be provided with the quotation.
- Installation, commissioning and Application Training: After installation, the engineer should demonstrate the system and offer a free of cost on-site training for a group of scientists/technical staff/students covering all aspects connected with the operation and routine maintenance of the instrument.
- Service facility in India: The suppliers should clearly mention about their service facilities in India for prompt service support along with the contact details of service engineers specially trained on the offered system. **Down-time call attendance should be within 24 hours.**
- The bidder should support the claim on specifications by providing original brochures.

#### **Technical Specifications for Computer**

- Processor : 3rd Generation Intel® Core™ i7-3770 Processor (3.4GHz, 8MB Cache, with Turbo Boost Technology 2.0)
- Memory : 8GB Dual Channel 1600 MHz DDR3
- Hard Drive : 1TB SATA 3.0Gb/s Hard Drive
- Video Card : 1.5GB GDDR5 NVIDIA® GeForce® GTX 660 or similar
- Ports : Minimum 6 USB Ports (with at least 2 in front), audio ports for microphone and headphone in front.
- Optical Drive : Dual Layer DVD Burner (DVD+-RW, CD-RW)
- Monitor : Minimum 54.6cm (21.5) Monitor with LED
- Network : 10/100/1000 on board integrated Network Port
- OS : Latest, licensed Windows OS compatible with instrument (preferably Windows 7 professional)

**Note:** *If any of the specifications mentioned for the computer is not compatible with the latest version of the Instrument software, quote the best configuration as per Instrument software requirements.*

**PUR/IMP/101/14****Technical specifications for Polarized Optical Microscope (POM)**

Polarized Optical Microscope system for transmitted and reflected light for heating stage application is required to analyze polymer and liquid crystal samples with the following specifications.

**Detailed specifications**

<b>S. No.</b>	<b>Description</b>	<b>Specifications</b>
1.	Microscope Frame	Frame for both transmitted and reflected light application
2.	Illumination	<ul style="list-style-type: none"> <li>• Microscope stand for reflected and transmitted light with LED illumination with interchangeable stages</li> <li>• State of the art integrated light management and contrast facility with RS232/USB interfaces</li> <li>• Optical filters for heat protection, day-light conversion, Neutral Density including blue filter</li> </ul>
3.	Focusing	Two steps focus drive or better Focusing with individual torque adjustment facility Focus drive should be height adjustable
4.	Turret	Revolving nosepiece 5-fold for pol and centrable
5.	Magnification range	Best corrected long working distance objectives 10x, 20x, 50x and 100x. Additional long working distance head for heating stage applications
6.	Eyepiece tube	<ul style="list-style-type: none"> <li>• Trinocular Pol Phototube, with fixed photo tube, with tube lens <math>\infty/1x</math>, with 30° viewing angle</li> <li>• High resolution condenser suitable for all the objectives with higher numerical aperture</li> </ul>
7.	Eye piece	Plan achromat eyepiece pair 10x/22 – both focusable and adjustable
8.	Stage	<ul style="list-style-type: none"> <li>• Stage should be extremely scratch resistant, precisely plane parallel with adjustable torque</li> <li>• Top grade circular rotatable stage (360°) with 2 verniers 0.1°, centrable condenser holder with left/right leveling with click-stop at every 45° rotation with object guide for X-Y movement</li> <li>• Stage should have flexible settings with bore holes for accessories like heating stage</li> </ul>
9.	Compensator	Lambda and quarter lambda
10.	Polarizer and Analyzer	Rotatable Polarizer with three resting positions 0°/45°/90°. Analyzer - 360° Rotatable for transmitted light and reflected light.
11.	Digital camera	<ul style="list-style-type: none"> <li>• Should be high resolution, scientific grade with interface cable and standard software for connecting to a computer with image resolution of minimum 5 megapixels</li> <li>• Any standard PC interface for power supply and data transfer. Software and hardware should be compatible with the latest operating systems Win XP or above</li> <li>• with suitable optical C-Mount and computer interfaces</li> </ul>

		with fire wire or advanced ports
12.	Imaging software	<ul style="list-style-type: none"> <li>• Software should have a provision for acquiring a sequence of images that can be replayed as a movie. The interval between images can be defined from seconds to hours with the start time defined after a specified delay or at particular time.</li> <li>• Original licensed version of the software should be provided in CDs.</li> <li>• Help manuals of the software should also to be provided in hard/soft versions</li> </ul>
13.	Computer	A branded computer with i5 processor with a monitor should come with factory loaded software for the data collection and data process. Manufacturer must offer their licensed software developed by them with certificates. Periodical updates of the software should be provided free of cost for a period of five years.
14.	Polarised Optical Microscope system should have option to interface with Fluorescence attachment	
15.	Optical Microscope stage should have flexible settings to accommodate accessories like heating stage	
16.	Power Supply	230 ± 10%V, 50 Hz
17.	Warranty	2 years
18.	<b>Optional</b>	1. Magnification changer 1x, 1.5x, 2.0x
19.		2. Fluorescence attachment

**PUR/IMP/112/14****Specification for X-ray photoelectron spectroscopy (XPS) with X-ray beam induced secondary electron images (SXI) and XPS maps**

The proposed system must be able to characterize conducting and insulating solid materials used for a broad range of material applications.

The XPS system must be capable of achieving the following

- The ability to provide quantitative elemental and chemical state information from the surfaces of solid materials including: powders, metals, semiconductors, polymers, glass, ceramics, thin films, coatings, catalyst, nano materials etc.
- The ability to perform large area XPS measurements.
- The ability to perform complete XPS measurements from selected areas which include the ability to provide survey spectra, narrow region spectra from elements of interest, and sputter depth profiling if required.
- The ability to perform small area XPS measurements without damaging the nature of the surface of the sample.
- The ability to obtain optical images, X-ray beam induced secondary electron images (SXI), and XPS maps for locating sample features of interest with a variety of contrast mechanisms (Optical, secondary electron, elemental and chemical).
- Sputter depth profiling should be available in both the large and selected area analysis mode.
- In the selected area mode, multipoint sputter depth profiling should be available to simultaneously obtain depth profiles on and off of a selected sample features or material defect.
- The ability to perform angle dependent XPS measurements. In this the whole of the X-ray spot is within the analysis area over the range of sample angles.
- The ability to provide azimuthal rotation during the sputter portion of a sputter depth profile.
- Robust charge neutralization capability for the analysis of insulating materials to facilitate ease-of-use and automated analysis.
- Robust auto-Z height alignment of samples to facilitate ease-of-use and automated analysis.
- Intuitive easy-to-use software packages for instrument operation and data reduction.
- The data reduction package should be available in a stand-alone format for off-line data reduction.

**Technical Specifications:**

1. The energy analyzer should be 180° hemispherical analyzer with an electrostatic input lens to avoid the problems associated with magnetic immersion lenses.
2. A UHV analysis mu-metal chamber with sufficient number of ports that allow for the additional X-ray sources, ion sources and sample preparation chambers to meet current and future needs.

3. Pre chamber and specimen chambers with proper heating and cooling and rough vacuum. The vacuum status and temperature should be controlled with proper monitoring with digital display.
4. The analysis is pumped using state of art turbo molecular pump which allows the chamber to achieve a vacuum better than  $5 \times 10^{-10}$  mbar. The whole vacuum system should be automatically controlled with fail safe operation. Continuous monitoring and logging of vacuum system parameters
5. A mono-chromated micro-focused scanning Al K $\alpha$  and dual anode Al/Mg K $\alpha$  X-ray source.
6. Proper power supply and control system for the X-ray source with proper cooling system (Water circulated) and source should be protected from all safety measures.
7. The equipment should be provided with an integral bake out systems with covers.
8. The diameter of the micro focused monochromated scanning X-ray beam must be adjustable from 10 $\mu$ m to 100 $\mu$ m or better.
9. The monochromated micro-focused scanning x-ray beam must have the ability to scan the X-ray beam, of any specified diameter, on the sample, to an area of greater than 1000  $\mu$ m x 1000  $\mu$ m
10. The minimum analysis area for selected area measurements should be at least 20  $\mu$ m in diameter.
11. Fully automated 5-axis (X, Y, Z, rotation and tilt) euscentric specimen stage with bakeable motors on all axis.
12. Faraday current measurement facility
13. Microscope Specimen viewing with a high resolution color CCD TV Video Camera with digital zoom facility and proper light source illumination.
14. Specimen holder with provision for 6 samples loading at a time or more.
15. In situ heating and cooling stage (-120°C to 500°C) option and to maintain all 5 axes functionality over the entire temperature range.
16. Software controlled automated specimen transfer mechanism.
17. A FIG floating Ar ion gun that generates high current density at low beam energy for effective specimen cleaning, depth profiling and charge neutralization.
18. The floating column Ar<sup>+</sup> ion gun must also be able switch between the neutralization and sputtering modes under software control during a sputter depth profile.
19. The instrument should be equipped with a robust dual beam charge neutralization system that uses low energy electrons (typically 1-2 eV) and low energy ions (typically 5-10 eV) for charge neutralization.
20. Dual beam charge neutralization should be software-controlled and one setting should work for nearly all sample types with no operator intervention (tuning). Dual beam charge neutralization must be demonstrated on the O-C=O 289 eV C 1s peak, from clean PET, to be < 0.85 eV FWHM.
21. Multichannel detector should provide maximum sensitivity and resolution in both the spectroscopy and mapping analysis mode.
22. The ultimate XPS energy resolution of <0.50 eV FWHM for the Ag 3d<sub>5/2</sub> peak.

23. XPS sensitivity as demonstrated using the Au ( $4f_{7/2}$ ) and Ag  $3d_{5/2}$  peak performance shown in the table below is required to ensure a viable selected area and large area XPS capability:

Mandatory Sensitivity Selected Area Analysis	Size	Resolution (FWHM on Ag $3d_{5/2}$ peak)
$\geq 4$ kcps	$\leq 10.0 \mu\text{m}$	$\leq 0.60$ eV
$\geq 12$ kcps	$\leq 10.0 \mu\text{m}$	$\leq 1.00$ eV
$\geq 15$ kcps	$\leq 10.0 \mu\text{m}$	$\leq 1.30$ eV
$\geq 15$ kcps	$\leq 20.0 \mu\text{m}$	$\leq 0.60$ eV
$\geq 45$ kcps	$\leq 20.0 \mu\text{m}$	$\leq 1.00$ eV
$\geq 60$ kcps	$\leq 20.0 \mu\text{m}$	$\leq 1.30$ eV
Large Area Analysis		
$\geq 250$ kcps	100 x 1400 $\mu\text{m}$	$\leq 0.60$ eV
$\geq 1$ Mcps	100 x 1400 $\mu\text{m}$	$\leq 1.00$ eV

24. XPS spectroscopy, XPS mapping and X-ray induced secondary electron imaging with a minimum spatial resolution of 10  $\mu\text{m}$  or less.
25. The system should be capable of performing angle dependent XPS measurements at multiple angles automatically under software control and maintain the original analysis position as the angle is changed.
26. Sample stage movement must allow analysis of samples of different sizes up to 60 mm in diameter and up to 7 mm thick.
27. Compucentric Zalar / azimuthal rotation shall be provided.
28. The instrument control software must be able to save different sputtering conditions for future use.
29. Maximum current of the monatomic argon ion gun will be  $\geq 5 \mu\text{A}$  at 5 kV.
30. X-ray induced secondary electron imaging capabilities for the precise definition of the analysis position should be provided.
31. Optical platen imaging for sample navigation.
32. Vacuum pumping system consisting of ion pumps and Ti Sublimation pump with software controlled vacuum management.
33. A set of security features protecting the integrity of the vacuum system, in vacuum components, and electronics in case of power failure.
34. A state of the art computer system with latest OS and 23 inch LED monitor to manage, process, and print the acquired data with a laser jet color printer
35. The system must have the ability to be controlled remotely via an internal network or the internet.
36. Fully integrated software for full analytical capability including surveys, high resolution multiplexes, sputter depth profiles, chemical images and automated analysis.

37. Post Processing software for data processing algorithms including: background subtraction, factor analysis, curve and peak analysis and separation of multiple chemical states in maps, line scans and profiles.
38. The software package should be given multi user license to at least ten numbers.
39. Any up gradation in the software package should be made available with free of cost.
40. Remote diagnostic facility for maintenance and control of the system.

#### **Other mandatory Specifications**

1. Including Standard warranty for 3 year from the date of installation.
2. After warranty two years free AMC should be provided.
3. Spares and consumables for 5 years smooth operation.
4. Installation and extensive training at NIIST, Trivandrum by technical and application experts for ten days.
5. Workshop should be organized by the experts for detailed application and usage of the equipment for the NIIST Scientist and research scholars.

#### **Optional Items**

1. Equipment needed to carry out ultra-violet photoelectron spectroscopy (UPS) analysis with He I and He II, Ne I and Ne II excitations.
2. Equipment needed to carry out analysis Auger electron spectroscopy (AES).
3. UPS 20 KVA 1 hour back up input three phase, output single phase 220 Volt.