

# **TENDER FOR LAB EQUIPMENTS:**

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**INVITATION FOR BIDS**

Sealed and superscribed **Two-Part** bids are invited for supply of the following equipments.

**I. THIN FILM DEPOSITION SYSTEM AND TURBO PUMPING STATION - 1 No**

- |                                     |   |                                      |
|-------------------------------------|---|--------------------------------------|
| 1. TENDER NO.                       | : | IISER/PUR/5117/14                    |
| 2. DUE DATE                         | : | 27 <sup>th</sup> January 2015 [4 PM] |
| 3. DATE OF OPENING OF TECHNICAL BID | : | 28 <sup>th</sup> January 2015 [3 PM] |
| 4. DATE OF OPENING OF PRICE BID     | : | Will be notified later.              |
| 5. COST OF TENDER #                 | : | Rs. 500 + 4.04% VAT                  |
| 6. EMD [BID SECURITY] **            | : | Rs. 50,000/-                         |

**SPECIFICATIONS:**

**THIN FILM DEPOSITION SYSTEM**

For deposition of thin-films of metals like Pt, Pd, Au onto substrates with precise thickness control (~ 1 nm) in typical thickness range 5 -100 nm in ultra high vacuum environment.

**I. Chamber Design:**

See attached chamber schematic for typical dimensions. Should be manufactured of non-magnetic stainless steel. The finish (vacuum annealed, polished, welded) should be such that it is UHV compatible (He leak tested, leak rate < 1 x 10<sup>-10</sup> mbar l/s). All welds should be TIG internal. All ports to be CF Flanges with OFE Cu gaskets, some ports to be made rotatable – depending on use. Ports for vacuum gauges etc. are not shown. Note: The chamber design is based on a 6-way cross and is only suggestive; it may be modified for processing ease.

**II. Sample Holder Specifications:**

Sample size: 20 x 20 mm. Option for attaching masks.

Sample holder should be fitted with a compact substrate heater for in-situ heating and temperature sensor with readout. Typical temperature range RT - 500° C.

**III. Electron Beam Evaporator:**

- Capable of depositing Pt, Pd, Au, Ni, SiO<sub>x</sub> etc from a rod or crucible
- Mounting flange: DN40CF
- Bakeout temperature: 150°C
- Rod diameter: 2 -6 mm (typical)
- Rod feed: 20 -50 mm, should be possible externally without breaking vacuum
- Minimum Crucible size: 0.25 cc (minimum)

- g) Integrated manual shutter
- h) Operating pressure:  $10^{-10}$  -  $10^{-5}$  mbar
- i) Power supply with controller: ~ 500 W
- j) Internal water-cooling (if applicable)
- k) Electron emitting filament (W filament) should be readily user replaceable.

The E-Beam evaporator should preferably be sourced from anyone of the following MBE Komponenten, SPECS GmbH, Oxford Instruments, MDC Caburn, Tectra GmbH or equivalent sources.

**IV. Quartz Crystal Oscillator + Monitor/Controller Set:**

An UHV compatible, 5/6 MHz quartz crystal sensor head and monitor/controller for in-situ thickness monitoring. The sensor head assembly, including water-cooling tubes should be mounted typically on DN40CF flange. Controller should be capable of storing multiple values of density and acoustic impedance in the memory for repeated use and have a thickness resolution of 0.1 nm. It should include all accessories (e.g. Oscillator + Cables + Spare crystals set). The position of the quartz crystal inside the chamber should be typically at the same level as the sample holder.

**V. View Port:** A quick access view port should be provided as indicated in the attached figure sample exchange.

**VI. Pumping System and Measurement Gauges:**

- (a) Chamber Base pressure:  $1 \times 10^{-9}$  mbar (assisted by a liquid N<sub>2</sub> trap if necessary)
- (b) Air-cooled turbo molecular pump (TMP) + controller + oil free backing pump.
- (c) The TMP switch-on after reaching appropriate vacuum should preferably be automatic.
- (d) Chamber mounted Pressure measurement gauges should be capable of accurate pressure monitoring from atmospheric pressure down to  $10^{-10}$  mbar.
- (e) Additional gauge at the lip of the backing pump to monitor backing pressure independently.

**VII. Gate Valve:** A gate valve should be provided at the flange that connects to the turbo pump to allow full isolation of the chamber under vacuum, for clean storage over idle periods.

**VIII. Liquid Nitrogen cooling trap:** A cooled collar type of arrangement at the flange carrying the TMP, where liquid nitrogen can be poured for cryo-pumping. This should be fitted with inlet and vent arrangement for pouring the liquid and providing an exit route for the vapour.

**IX. Accessories:**

**X. Chilled Water Circulator:** A compact water chiller should be supplied capable of supporting 3 electron beam/Knudsen cell evaporators of the specification supplied + thickness monitor.

**XI. Metal Stand:** The system and its components should be supported on a custom made stand.

**XII. All components provided should be UHV compatible and bakable till 100° C or higher.**

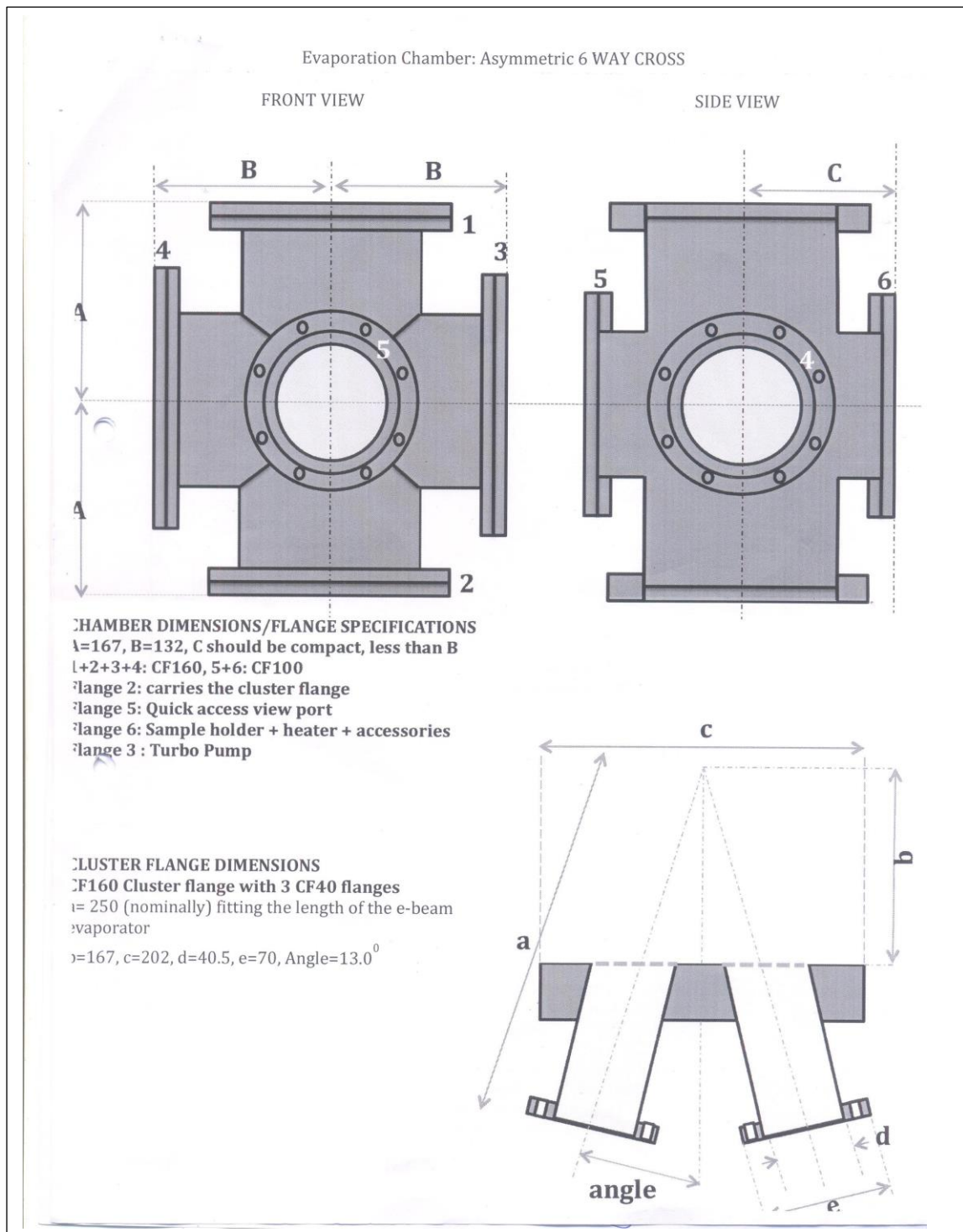
**XIII. As a part of the tender document, bidder MUST submit a technical drawing of the entire system (chamber + components + stand) with dimensions and specifications.**

**XIV. Installation:** The quoted price should include installation at customers' laboratory.

**XV. Optional Items:**

- 1) A second Substrate heater compatible with the above sample holder for heating till 1000 C.

- 2) Manual rotary stage to hold the sample holder + electrical connections for heater + temperature sensor.
- 3) Heating tapes for baking the chamber till 120 c.
- 4) Manually operated shutter for covering the sample from the sources. It should be designed such that it may be stationed in 3 positions (i) fully open (ii) covering the sample but not the quartz crystal head and (iii) covering both, the sample and the quartz crystal head.



**II. MICROWAVE REACTOR – 1 NO**

1. **TENDER NO.** : **IISER/PUR/4940/14**
2. **DUE DATE** : **27<sup>th</sup> January 2015 [4 PM]**
3. **DATE OF OPENING OF TECHNICAL BID** : **28<sup>th</sup> January 2015 [3 PM]**
4. **DATE OF OPENING OF PRICE BID** : **Will be notified later.**
5. **COST OF TENDER #** : **Rs. 500 + 4.04% VAT**
6. **EMD [BID SECURITY] \*\*** : **Rs. 50,000/-**

**SPECIFICATIONS:****MICROWAVE SYNTHESIS SYSTEM****Applications & Working Principle:**

A Microwave assisted organic synthesis system which can handle the synthetic reactions involving routine organic, organometallic, Nano materials synthesis, fluorination chemistry, catalysts using palladium, non-polar solvents like toluene, hexane etc.

**Specifications:**

The system should have the following features:

- Reaction scale range: 1 ml to 20 ml. More than 20 ml will be desirable quality.
- Maximum Operating Pressure: up to 25bar
- Maximum operating temperature: 300 °C
- Agitation: Magnetic stirrer (100-1000 RPM)
- Temperature Measurement: Effective mechanism to sense and digitally display the internal temperature
- Integrated Pressure Sensor to measure, display and document the reaction pressure
- There should be possibility of automatic overpressure release
- Vial: Borosilicate glass.
- Cooling System: Suitable cooling system should be provided for reducing the temperature,
- Possibility to transfer the details of the experiment through USB, and save the experimental methods for future reference
- Should have the features of changing the reaction parameters during the experiment.

**Additional accessories to be supplied:**

- Ⓢ Vials capacity: 10 ml or less (100 vials), 20-30 ml (50 vials),
- Ⓢ Re-usable septa and caps 100 No's for each size should be supplied.
- Ⓢ Magnetic bars: Suitable magnetic stirring bars for each size vial should be supplied.
- Ⓢ Should also quote for vessels that can handle special chemistries viz. fluorides, caustic solutions, etc. Other important and useful additional accessories may be quoted as an optional item.

### **III. CRYOSTAT WITH SUPERCONDUCTING MAGNET – 1 NO**

- |  |          |  |
|--|----------|--|
| <b>1. TENDER NO.</b>                       | <b>:</b> | <b>IISER/PUR/5156/14</b>                   |
| <b>2. DUE DATE</b>                         | <b>:</b> | <b>27<sup>th</sup> January 2015 [4 PM]</b> |
| <b>3. DATE OF OPENING OF TECHNICAL BID</b> | <b>:</b> | <b>28<sup>th</sup> January 2015 [3 PM]</b> |
| <b>4. DATE OF OPENING OF PRICE BID</b>     | <b>:</b> | <b>Will be notified later.</b>             |
| <b>5. COST OF TENDER #</b>                 | <b>:</b> | <b>Rs. 500 + 4.04% VAT</b>                 |
| <b>6. EMD [BID SECURITY] **</b>            | <b>:</b> | <b>Rs. 60,000/-</b>                        |

#### **SPECIFICATIONS**

This system will be used to make magneto-transport measurements on nanoscale devices down to 1.5 K in temperature.

##### **A. Dewar**

Bucket type around 8 inches of Inner diameter either "Vapor shielded or Liquid Nitrogen shielded. Static boil-off rate should not exceed more than 6 L /day. Specify the static boil-off rate.

##### **B. Superconducting Magnet**

- ≡ ~2 Inches of clear bore
- ≡ ~6 T offield at 4.2 K,
- ≡ +/-0.1% field homogeneity
- ≡ Should be equipped with persistent mode switch and quench protection

##### **C. Magnet support assembly**

- ≡ Electrical feed-through with at least 15 pins with appropriate cable and connectors
- ≡ Thermal radiation baffles.
- ≡ LHe fill and vent ports.
- ≡ Lifting lugs.
- ≡ LN2 precool/removal tube.
- ≡ Quench relief valve.
- ≡ One PSI safety pressure relief valves.
- ≡ Optimized current leads compatible with the magnet rating
- ≡ Superconducting magnet bus bars.
- ≡ Magnet supports.
- ≡ Sample access port, with o-ring groove, o-ring, and bolt circle.
- ≡ Cover plate for sample access port.
- ≡ Liquid Helium level monitor with top loading superconducting level probe, cable from the probe to the monitor.

**D. Variable Temperature Insert**

- ≡ Non-magnetic stainless steel construction
- ≡ Should be equipped with copper radiation baffles
- ≡ Operating temperature: 1.5 K -Room temperature
- ≡ Calibrated thermometers for the samples in the specified temperature range.
- ≡ Equipped with flow control needle valves.
- ≡ Sample space Dia ~1 inches or larger
- ≡ Electrical feed-throughs with 16 or more pins into the sample space.
- ≡ Sample positioner with OFHC sample mount equipped with heaters and holes for sample mounting.
- ≡ The sample mount position should be matched to the magnetic field center

**E. Magnet Power Supply (Optional)**

- ≡ Single phase, should support 50 Hz, 220 VAC, +/-5%
  - ≡ Bi-polar, Programmable sweep rates.
  - ≡ GPIB or USB communication ports for computer interface
  - ≡ Current rating 50 Ampere or more
  - ≡ Quench detection and protection
  - ≡ Persistent switch heater control
  - ≡ Visual display of current present in the leads
  - ≡ Output cable with a length of 10 feet or more
-

**NOTE: PLEASE PROVIDE ITEMIZED QUOTES FOR EACH COMPONENT OR EQUIPMENT MENTIONED CLEARLY.**

**TERMS & CONDITIONS**

- 1) **Separate Bid with Tender No. & Item Name shall be separately sent for each Tender**
- 2) Instructions to Bidders [Annexure I] shall be followed.
- 3) # Tender cost in the form of DD favouring IISERTVM shall be sent along with 'Technical bid'.
- 4) \*\*Bid Security [refundable without any interest] shall be as per clause 1.15 of Annexure I and shall also be sent along with Technical bid. In case the Bid security is provided by Bank Guarantee, specimen for the same is at Annexure II.
- 5) Clause 1.10[Bid Form] of Annexure I is **not** applicable for this Tender.
- 6) **Tenders without Tender Cost and Bid Security shall not be considered and summarily to be disqualified from participating tender.**
- 7) **Tender Opening:**  
All tenders will be opened at GEM Building. Authorized representatives of the bidders may attend the Tender Opening.

**TWO – PART TENDER**

**PART I – TECHNICAL BID:**

Consisting of all Technical details alongwith commercial terms and conditions. DD towards Tender Cost, Bid Security [EMD] and Integrity Pact signed shall be sent alongwith Technical bids, Clientele list and details of TWO major installations in India.

**PART II – PRICE BID:**

Showing item-wise prices for the items mentioned in the Technical Bid.  
***The technical bid and the Price bid should be in separate sealed and superscribed covers. Both these covers are to be put in a sealed bigger cover superscribing Tender No and due date.*** Technical bids will be opened first and after evaluation, price bids of only the shortlisted bidders will be opened.

**DEPUTY REGISTRAR  
[PURCHASE & STORES]  
IISERTVM**



## **INSTRUCTIONS TO BIDDERS**

### **1.1. ELIGIBLE BIDDERS.**

1.1.1 This Invitation for Bids is open to all suppliers.

1.1.2 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.

### **1.2. COST OF BIDDING**

1.2.1 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.

### **1.3. FRAUD AND CORRUPTION:**

1.3.1 The purchaser requires that the bidders/suppliers and contractors observe the highest standard of ethics during the procurement and execution of such contracts.

1.3.2 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;

The Bidding Documents

### **1.4. COST OF BIDDING DOCUMENTS**

1.4.1 Interested eligible bidders may download the document from our Website. However the bid document cost to be paid during the submission of the bid.

### **1.5. CONTENT OF BIDDING DOCUMENTS**

1.5.1 The goods required, bidding procedures and contract terms are prescribed in the bidding documents which should be read in conjunction.

1.5.2 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.**

### **1.6. CLARIFICATION OF BIDDING DOCUMENTS**

1.6.1 A prospective Bidder requiring any clarification of the Bidding Documents shall contact the Purchaser in writing via fax/email. 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.

### **1.7. AMENDMENT OF BIDDING DOCUMENTS**

1.7.1 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.

1.7.2 All prospective bidders who have received the bidding documents will be

notified of the amendment in writing or by e-mail and will be binding on them. The same would also be hosted on the website of the purchaser and all prospective bidders are expected to surf the website before submitting their bids to take cognizance of the amendments.

1.7.3 In order to allow prospective bidders reasonable time to take the amendment into account, while 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.

1.7.4 In case of any amendment to the bid, it will be done at least 7 days before due date and will be published in website. Bidders are required to keep this in view before submission. Normally extension of due date will not be entertained. However in special cases if due date is extended, it will be notified under the same tender notice before 3 days of due date.

### **PREPARATION OF BIDS**

#### **1.8. LANGUAGE OF BID**

1.8.1 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 especially when the details are technical.

However of GOI makes it mandatory under Rajbhasha Abhniyam in that case views of Rajbhasha unit of IISER-TVM may be sought.

1.8.2 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.

#### **1.9. DOCUMENTS COMPRISING THE BID**

1.9.1 The bid prepared by the Bidder shall include:

- a) Bidder Information
- b) Bid security as specified in the Invitation to Bids.
- c) Service support details
- d) Deviation Statement if any.
- e) Performance Statement.
- f) Manufacturer's Authorization.
- g) Documentary evidence establishing that the bidder is eligible to bid and is qualified to perform the contract if its bid is accepted.
- h) Bid form.
- i) Documents establishing goods eligibility and conformity to bidding documents.
- j) Applicable Price Schedule Form.
- k) 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.

#### **1.10. BID FORM AND PRICE SCHEDULE**

1.10.1 The bidder shall complete the Bid with the appropriate price schedule.

#### **1.11. BID PRICES**

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

1.11.2 Prices indicated on the price-schedule form shall be entered separately in the following manner:

#### **(A) FOR GOODS MANUFACTURED WITHIN INDIA**

(i) The price of the goods quoted Ex-works including taxes already paid.

(ii) VAT and other taxes like excise duty etc [**shall be shown extra**] which will be payable on the goods if the contract is awarded.

- a. 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.
- b. The installation, commissioning and training charges including any incidental services, if any.

**(B) FOR GOODS MANUFACTURED ABROAD**

**Bidders are required to show break-up of Ex-works [which should include packing and handling charges], FOB/FCA and CIF/CIP price in the quotation. IISERTVM has a mechanism for consolidation and customs clearance. The consolidators will be nominated for this purpose at the time of awarding the contract if desires so.**

- (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.
- (ii) The charges for insurance and transportation of the goods to the port/place of destination.

**(iii) The agency commission charges should be shown, if any.**

- (iv) The installation, commissioning and training charges including any incidental services, if any

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

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

1.11.5 The price quoted shall remain fixed during the contract period and shall not vary on any account

1.11.6 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.

1.11.7 ***The purchases made by the purchaser for scientific purpose are exempt from excise duty under 10/97 notification and Custom Duty under notification 51/96.***

**1.12. BID CURRENCIES**

1.12.1 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.

**1.13. DOCUMENTS ESTABLISHING BIDDER'S ELIGIBILITY AND QUALIFICATIONS**

1.13.1 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.

1.13.2 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, if any.

(b) Bidder that doesn't manufacture the goods it offers to supply shall submit to Manufacturers' Authorization Form (MAF) 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 India, it shall furnish the certificate to the effect that the bidder is or will be represented by an agent in India 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

- 1.13.3 obligations etc. during the warranty and post-warranty period.  
Conditional tenders shall not be accepted

**1.14. DOCUMENTS ESTABLISHING GOODS' ELIGIBILITY AND CONFORMITY TO BIDDING DOCUMENTS**

- 1.14.1 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.
- 1.14.2 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.
- 1.14.3 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.

**1.15. BID SECURITY**

- 1.15.1 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.
- 1.15.2 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 any freely convertible foreign exchange 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 operating in India in the form provided in the bidding documents and valid for 45 days beyond the validity of the bid. In case a bidder desires to submit a BG issued from a foreign bank, then the same should be confirmed by a Nationalized/Scheduled Indian bank; or
  - (b) Fixed Deposit receipt pledged in favour of the IISER-TVM.
  - (c) A Banker's cheque or demand draft in favour of IISERTVM issued by any Nationalised/Scheduled Indian bank.
- 1.15.3 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.

- 1.15.4 The bid security should be submitted in its original form. Copies shall not be accepted.
- 1.15.5 While Bid security (EMD) is a requirement, the Director IISER-TVM may grant exemption of Bid security to some specific parties having sound credentials and are of national/international repute.
- 1.15.6 The bid security of unsuccessful bidder will be discharged /returned as promptly as possible positively within a period of 15 days after the expiration of the period of bid validity or placement of order whichever is later, without any interest.
- 1.15.7 The successful Bidder's bid security will be discharged upon the Bidder furnishing the performance security, without any interest. Alternatively, the BS could also be adjusted against PS, if it is paid through DD/BC.
- 1.15.8 **The firms registered with DGS&D, NSIC if any, are exempted from payment of bid security (BS) provided such registration includes the item they are offering which are manufactured by them and not for selling products manufactured by other companies.**
- 1.15.9 In case a bidder intimates at the time of tender opening in writing that the bid security is kept inside the financial bid, then in such cases, the technical bid of the party would be accepted provisionally till opening of the financial bids with which the party has attached the bid security.
- 1.15.10 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 or fails to sign the contract and/or fails to furnish Performance Security within 21 days from the date of contract/ order.**
- 1.16. PERIOD OF VALIDITY OF BIDS**
- 1.16.1 Bids shall remain valid for minimum of 90 days after the date of bid opening prescribed by the Purchaser. **A bid valid for a shorter period shall be rejected by the Purchaser as non-responsive.**
- 1.16.2 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 cable, telex, 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.
- 1.16.3 Bid evaluation will be based on the bid prices without taking into consideration the above corrections.
- 1.17. FORMAT AND SIGNING OF BID**
- 1.17.1 The bids may be submitted in single envelop or in two parts as specified in the Invitation for Bids.
- 1.17.2 In case the bids are invited on single envelop basis, then the Bidder shall prepare two copies of the bid, clearly marking each "Original Bid" and "Copy Bid", as appropriate. In the event of any discrepancy between them, the original shall govern.
- 1.17.3 In case the bids are invited on two-bid system, 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.

1.17.4 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 un-amended printed literature, shall be initialed by the person or persons signing the bid.

1.17.5 Any interlineations, erasures or overwriting shall be valid only if they are initialed by the persons or persons signing the bid.

**1.18. SUBMISSION, SEALING AND MARKING OF BIDS**

1.18.1 The bidders may submit their duly sealed bids generally by post or by hand.

1.18.2 In the case of bids invited on single envelop basis, the Bidders shall seal the original and each copy of the bid in separate inner envelopes, duly marking the envelopes as "original" and "copy". The envelopes shall then be sealed in an outer envelope.

1.18.3 In the case of bids invited on two part basis, the Bidder shall seal the un-priced commercial and technical bid comprising the documents as listed in ITB 1.9.1 excepting for h & j and the priced bid in two separate envelopes duly marked as "Technical bid" and "priced bid". Both the envelopes shall then be sealed in one outer envelope.

1.18.4 (a) The inner and outer envelopes shall be addressed to the Purchaser indicated.

(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.

1.18.5 **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.**

1.18.6 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. However, the opened priced bid would be sealed immediately by the TOC without disclosing the price.

**1.19. DEADLINE FOR SUBMISSION OF BIDS**

1.19.1 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.**

1.19.2 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.

**1.20. LATE BIDS**

1.20.1 Any bid received by the Purchaser after the deadline for submission of bids prescribed by the Purchaser will be rejected.

1.20.2 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.

**1.21. WITHDRAWAL, SUBSTITUTION AND MODIFICATION OF BIDS**

1.21.1 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.

1.21.2 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.

Opening and Evaluation of Bids

**1.22. OPENING OF BIDS BY THE PURCHASER**

1.22.1 The Purchaser will open all bids one at a time in the presence of Bidders' authorized 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 bidding, the financial bid shall be opened only after technical evaluation. 1.22.2 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.

1.22.2 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 Price-bids in the case of two-bid system.

1.22.2.1 Bids that are received late shall not be considered further for evaluation, irrespective of the circumstances.

- 1.22.2.2 ***Bidders interested in participating in the bid opening process, should depute their representatives along with an authority letter to be submitted to the purchaser at the time of bid opening.***

**1.23. CONFIDENTIALITY**

- 1.23.1 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.
- 1.23.2 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.

**1.24. CLARIFICATION OF BIDS**

- 1.24.1 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.

**1.25. CONVERSION TO SINGLE CURRENCY**

- 1.25.1 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 in the case of single part bidding and the rates prevalent on the date of opening of the Priced bids in the case of two-part bidding. For this purpose, exchange rate notified in [www.xe.com](http://www.xe.com) or [www.rbi.org](http://www.rbi.org) or any other website could also be used by the purchaser.

**1.26. CONTACTING THE PURCHASER**

- 1.26.1 Subject to ITB Clause 1.24, 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.
- 1.26.2 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.

**1.27. POST QUALIFICATION**

- 1.27.1 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.
- 1.27.2 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.
- 1.27.3 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.

**1.28. PURCHASER'S RIGHT TO ACCEPT ANY BID AND TO REJECT ANY OR ALL BIDS**

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.



## **GENERAL TERMS & CONDITIONS**

### **1.29. WARRANTY**

- 1.29.1 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.
- 1.29.2 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.
- 1.29.3 Unless otherwise specified, 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, 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.
- 1.29.4 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.
- 1.29.5 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.
- 1.29.6 If having been notified, the Supplier fails to remedy the defect within the 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.
- 1.29.7 Goods requiring warranty replacements must be replaced on free of cost basis to the purchaser.
- 1.29.8 **Performance Guarantee:**  
**The successful bidder is required to submit a performance Guarantee of 10% of Purchase Order value valid during warranty period.**

### **1.30. PENALTY CLAUSE**

- 1.30.1 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 the percentage specified in contract of the delivered price of the delayed Goods or unperformed Services or contract value for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the Percentage specified in contract. Once the maximum is reached, the Purchaser may consider termination of the Contract pursuant to GCC. Clause on Termination for Default. The SCC shall also indicate the basis for ascertaining the value on which the penalty shall be applicable

### **1.31. INSURANCE**

- 1.31.1 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 contract.
- 1.31.2 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.

1.31.3 Where delivery is on FOB or FCA basis, insurance would be the responsibility of the purchaser.

1.31.4 With a view to ensure that claims on insurance companies, if any, are lodged in time, the bidders and /or the Indian agent 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 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.

**1.32 TRANSPORTATION**

1.32.1 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.

1.32.2 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.

1.32.3 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.

**1.33 PACKING**

Should be as per standards prescribed for international trade and movement of the goods.

1.34 **STANDARDS**

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.

**1.35 PERFORMANCE SECURITY**

1.35.1 Within 21 days of receipt of the notification of award/PO, the Supplier shall furnish performance security of 7% of Contract/ Purchase Order value in the amount specified in the Contract, valid till 60 days beyond the completion of contractual obligations.

1.35.2 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.

- 1.35.3 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.
- 1.35.4 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 authorized dealer/bidder.
- 1.35.5 The Performance security shall be in one of the following forms:
- (a) A Bank guarantee or stand-by Letter of Credit 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 favour of the purchaser. Or,
  - (c) A Fixed Deposit Receipt pledged in favour of the Purchaser.

**1.36 DELIVERY SCHEDULE**

Delivery schedule should be specified clearly.

**1.37 PAYMENT TERMS**

**For Indigenous supplies payment will be made within 30 days from the date of supply, installation and commissioning. For Imported goods, the preferred payment mode of the Institute is Sight Draft /Net 30 days. If Letter of Credit is insisted by the vendors, the LC will be established for 100% of Purchase Order value out of which 90% will be paid against shipping evidence and 10% after installation and commissioning and on submission of Performance Bank Guarantee for 10% of Purchase Order value which should be valid during warranty period. However the advance payment to the vendors is not encouraged.**

**Deputy Registrar  
[Purchase & Stores]**

**MODEL BANK GUARANTEE FORMAT FOR FURNISHING BID SECURITY (BS)**

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 (IISER-TVM) 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 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 and address of the Bank and address of the Branch.