



॥ त्वं ज्ञानमयो विज्ञानमयोऽसि ॥

**Indian Institute of Technology Jodhpur**

***TENDER FOR E-PROCUREMENT OF Supply and Installation of  
Chemical Reactor Unit with Accessories***

**Bids to be submitted online (CPPP)**

**For**

**(Technical and Financial bid as per schedule of requirement)**

**NIT No: IITJ/SPS/2020-2021/30 dated 16 June 2020**

**Office of Stores & Purchase  
IIT Jodhpur, Institute Building (East),  
NH-65, Nagaur Road, Karwar,  
Jodhpur-342037, Rajasthan  
Phone: 0291 2801 101, Email: [sps@iitj.ac.in](mailto:sps@iitj.ac.in)**

## SCHEDULE

Name of Organization	Indian Institute of Technology Jodhpur
Open Tender Notice No. (NIT)	<b>IITJ/SPS/2020-2021/30 dated 16 June 2020</b>
Tender Type (Open/Limited/EOI/Auction/Single)	Open
Tender Category (Services/Goods)	Goods
Type/Form of Contract (Supply/ Auction/ Service/ Buy/ Empanelment/ Sell)	Buy
Product Category	Chemical Reactor Unit with Accessories
Is Multi Currency Allowed	Yes
Date of Issue/Publishing	16/06/20 (13:00 Hrs)
Document Download/Sale Start Date	16/06/20 (13:00 Hrs)
Document Download/Sale End Date	07/07/20 (15:00 Hrs)
Last Date and Time for Uploading of Bids	07/07/20 (15:00 Hrs)
Date and Time of Opening of Technical Bids	08/07/20 (16:00 Hrs)
EMD	<b>Rs.1,00,000/-</b>
No. of Covers (1/2/3/4)	02
Bid Validity days (180/120/90/60/30)	90 days
Address for Communication	Office of Stores & Purchase, Institute Building (East), IIT Jodhpur, NH-65, Nagaur Road, Karwad, Jodhpur-342037
Contact No.	0291-2801 101/ 0291-2801 104
Email Address for Correspondence	<a href="mailto:sps@iitj.ac.in">sps@iitj.ac.in</a>

Indian Institute of Technology Jodhpur (hereinafter referred to as the “Institute”), an Educational Institute of National Importance, invites online Bids in two-bid format for supply and installation of “**Chemical Reactor Unit with Accessories**” at the Institute as per the technical specifications given in the *Annexure-I* to the Tender form. All offers should be made in English and should be written in both figures and words. Tender forms can be downloaded from the CPP Portal (<http://eprocure.gov.in/eprocure/app>) & Institute website <http://www.iitj.ac.in/tenders/index.php?id=equipment>. The bidders are requested to read the tender document carefully and ensure compliance with all specifications/instructions herein. Non-compliance with specifications/instructions in this document may disqualify the bidders from the tender exercise. The Director, IIT Jodhpur reserves the right to select the item (in single or multiple units) or to reject any quotation wholly or partly. Incomplete tenders, amendments and additions to tender after opening or late tenders are liable to be ignored and rejected.

#### **1. Instructions for Online Bid Submission :**

- 1.1.** There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, organization name, location, date, value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a tender publishing on the CPP Portal.
- 1.2.** Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 1.3.** Bidder will go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents – including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- 1.4.** The tenders will be received online through portal <http://eprocure.gov.in/eprocure/app>. In the Technical Bids, the bidders are required to upload all the documents in .pdf format. All bids both Technical and Financial should be submitted in the eProcurement portal.
- 1.5.** Possession of a Valid Class II/III Digital Signature Certificate (DSC) in the form of smart card/e-token in the company's name is a prerequisite for registration and participating in the bid submission activities through <http://eprocure.gov.in/eprocure/app>. Digital Signature Certificates can be obtained from the authorized certifying agencies, details of which are available in the web site <https://eprocure.gov.in/eprocure/app> under the link “Information about DSC”.
- 1.6.** The Institute will not be responsible for any type of technical issue regarding uploading of Tender on website.

## **2. SEARCHING FOR TENDER DOCUMENTS**

- 2.1.** There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, organization name, location, date, value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a tender published on the CPP Portal.
- 2.2.** Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- 2.3.** The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

## **3. PREPARATION OF BIDS**

- 3.1.** Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 3.2.** Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- 3.3.** Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS formats. Bid documents may be scanned with 100 dpi with black and white option.
- 3.4.** To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" are available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

## **4. SUBMISSION OF BIDS**

- 4.1.** Bidder should log into the site well in advance for bid submission so that he/she upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 4.2.** The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 4.3.** Financial Bids can be submitted in .XLS format.

- 4.4. The bidder may add rows to include the prices of all components & warranties, installation etc. whichever applicable.
- 4.5. The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 4.6. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 4.7. Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 4.8. Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet.

## **5. ASSISTANCE TO BIDDERS**

- 5.1. Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- 5.2. Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is 0120-4200462, 0120-4001002, 0120-4001005, 0120-6277787.

## **6. INSTRUCTION FOR PREPARATION & SUBMISSION OF BIDS:**

- 6.1. Technical Bid should be submitted in PDF format.
- 6.2. Financial Bid should be submitted in .XLS Format.
- 6.3. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF formats. Bid documents may be scanned with 100 dpi with black and white option.
- 6.4. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 6.5. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 6.6. **Kindly add scanned PDF of all relevant documents in a single PDF file like, compliance sheet, OEM/Principle Certificate etc.**
- 6.7. Bidder should log into the site well in advance for bid submission so that he/she upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.

- 6.8. Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 6.9. The technical and financial bids should be submitted online through portal <http://eprocure.gov.in/eprocure/app> in original. The financial bid should include the cost of main equipment/item and its accessories. If there is any separate cost for installation etc. that should be quoted separately.
- 6.10. **Each bidder should be marked with the following reference on the top bids submitted online: "IITJ/SPS/2020-2021/30 dated 16 June 2020".**
- 6.11. The printed literature and catalogue/brochure giving full technical details should be included with the technical bid to verify the specifications quoted in the tender. The bidders should submit copies of suitable documents in support of their reputation, credentials and past performance in .pdf format.
- 6.12. The rates should be quoted in figures and words both.
- 6.13. **Amendment of Bidding Documents:** At any time prior to the deadline for submission of bids, IIT JODHPUR may, for any reason, whether on its own initiative or in response to the clarification request by a prospective BIDDER may modify the bid document. All prospective BIDDERS who have downloaded the bidding document may visit IIT JODHPUR website /<https://eprocure.gov.in/eprocure/app> for amendments /modifications which will be binding on them.

## 7 EARNEST MONEY DEPOSIT DETAILS

- 7.1 **EMD of Rs. 1,00,000/-(Rs One Lakh only)** in the form of Demand Draft of a scheduled bank in the name of Director, IIT Jodhpur valid for **90 days** from the date of opening of the tender or in the form of Bank Guarantee. The firm registered with NSIC & MSME as manufacturer for the supply of the same category of item for which the party is submitting quotation will be exempted from submission of EMD. Intended parties will have to give proof of registration along with their quotation. Self-attested scan copy of the valid registration certificate must be uploaded with the technical bid. Any technical bid is found without the demand drafts of earnest money deposit will be rejected. EMD of the unsuccessful bidders shall be refunded without any interest at the earliest after finalization of the purchase of concerned item.
- i. The EMD will be returned to the BIDDERS(s) whose offer is not accepted by IIT Jodhpur within one month from the date of the placing of the final order(s) on the selected BIDDER(s). In case of the BIDDER(s) whose offer is accepted the EMD will be returned on submission of Bank Guarantee as Security Deposit (SD). However, if the return of EMD is delayed for any reason, no interest / penalty shall be payable to the BIDDERS.
  - ii. The successful BIDDER, on award of contract / order, must send the contract / order acceptance in writing, within 15 days of award of contract / order failing which the EMD will be forfeited.

iii. The EMD shall be forfeited: In case a successful BIDDER fails to furnish the Security Deposit within 14 days from the date of issue of Order.

7.2 The technical offer **should not contain any price information**. Please do not insert 'Financial Bid' (prices quoted) in the technical bid envelope. If the price quoted is submitted with technical bid the tender will be rejected.

### 7.3 Online Bid Prices:

The Bidder shall indicate on the Price Schedule the unit price and total bid prices of the goods it proposes to supply under the Contract. To this end, the Bidders are allowed the option to submit the online bids for any one or more schedule specified in the "Schedule of Requirement" and to offer discounts for combined schedules. However, Bidders shall quote for the complete requirement of goods and services specified under each schedule on a single responsibility basis, failing which such bids (for the schedule in question) will not be taken into account for evaluation and will not be considered for award.

#### I. For goods offered from within India:

- a. The price of the goods should be quoted for destination basis, charges towards freight, installation etc. may be mentioned inclusive of GST as applicable after referring the attached GST Notification.
- b. Any sales or other taxes/duties should be clearly mentioned, which will be payable on the goods in India if the contract is awarded.
- c. Charges for inland transportation, insurance and other local costs incidental to delivery of goods to their final destination should be mentioned.
- d. Any element of cost, taxes, duties levies etc. not specifically indicated in the online bid, shall not be paid by the purchaser. If GST amount is not quoted in the BOQ (Financial Bid), the total cost will be treated as inclusive of GST. No further communication will be entertained later or else the EMD will be forfeited.

#### II. For goods offered from abroad

- a) The price of goods shall be quoted in Ex-Works/FCA/FOB and the same should be mentioned in terms & conditions of the firm.
- b) Charges for inland transportation, insurance and other local costs incidental to delivery of the goods from the port of entry in India to their final destination should be specified.
- c) The terms FOB, FCA, Ex-Works etc. shall be governed by the rules and regulations prescribed in the current edition of INCOTERMS, published by the Chamber of Commerce, Pads.
- d) Prices quoted by the bidder shall remain firm and fixed during the currency of the contract and not subject to variation on any account, unless otherwise specified in the Schedule of Requirements.

- e) Either the agent on behalf of the foreign principle or the foreign principle directly could bid in a tender, but not both. Further, in cases where agents participate in a tender on behalf of one manufacturer, they should not be allowed to quote on behalf of another manufacturer along with the first manufacturer.

### **III. Bid currencies**

- a. For domestic goods prices shall be quoted in Indian rupees only. Commission for Indian Agent, if payable, shall also be quoted in Indian Rupees only.
- b. For imported goods prices shall be quoted either in Indian rupees or may be quoted in foreign currency which must be under the Reserve Bank of India's notified basket of currencies and the portion of the allied work and services, which are to be undertaken in India (like installation & commissioning of equipment) are to be quoted in Indian currency.

### **IV. Indian Agent**

- a) If a foreign bidder has engaged an agent in India in connection with its online bid it will be required to give the following information in the online bid:
- i. Name and address of the Indian agent with their permanent income tax number.
  - ii. Details of the services the agent will render
  - iii. Agency commission shall be indicated in the space provided for in the price schedule and will be paid to the bidder's agent in Indian rupees.

## **7.4 Terms of the Technical Committee**

- 7.4.1** On the due date the Technical bids will be opened and referred to the Technical Committee which is duly constituted by the Director, IIT Jodhpur. The committee will go through the technical aspects of the tender and recommend short listed firms. The recommendation of the technical committee is the final and binding on all the parties. The Technical committee may visit the manufacturing site to assess the capabilities to manufacture the tendered items as per the specifications.
- 7.4.2** The technical evaluation will be an assessment of the Technical Bid. IIT Jodhpur representatives will proceed through a detailed evaluation of the Technical Bids as defined in Schedule of requirements, specifications and allied technical details, in order to determine whether they are substantially responsive to the requirements set forth in the tender. In order to reach such a determination, IIT Jodhpur will examine the information supplied by the BIDDERS, and shall evaluate the same as per the specifications mentioned in this tender.
- 7.4.3** The Technical Committee will examine all the Technical aspects of the bids received. Further, the Technical Committee may seek additional information from the existing users at IIT Jodhpur or from other Institutes and also call for Technical presentations from the BIDDERS if it is required so.



- 7.4.4 The information received and the bids already submitted together will be examined with reference to the tendered specifications and evaluation is made by the Technical Committee.
- 7.4.5 After the technical evaluation is completed and approved, IIT Jodhpur shall inform to the BIDDERS whose bids have been rejected technically with the reasons for rejection on e-Procurement Portal (<https://eprocure.gov.in/eprocure/app>).
- 7.4.6 The successful BIDDERS will be informed regarding the date and time of Commercial bid opening.
- 7.4.7 The purpose of obtaining two bids (technical and commercial) is to evaluate all the firms on technical basis with reference to the tendered specifications, performance of similar Solutions/Applications elsewhere, obtaining users views with reference to the earlier supplies. This will enable the technical committee to arrive at a fair recommendation in the interest of the organization.
- 7.4.8 In the event of seeking any clarification from various BIDDERS by IIT Jodhpur, the BIDDERS are required to furnish only technical clarifications that are asked for. No amendment to commercial bid will be entertained at that stage. In case if a BIDDER fails to quote for a particular item it amounts to non-compliance and hence such bid will not be considered for further evaluation. Further during this process if any BIDDER indicates the price during the clarification such bids also will not be considered for further evaluation.

#### **8. INVITATION FOR TENDER OFFERS (Chemical Reactor Unit with Accessories)**

The BIDDERS are requested to give detailed tender in two Bids i.e.

- a. **Part - I: Technical Bid**
- b. **Part - II: Financial Bid**

#### **Technical Bid**

#### **8.1 Pre-Qualification and Technical Specification Qualification Criteria**

The online envelope clearly marked as "**Technical Bid-Envelope No.1**" shall contain the all scanned copies of originals documents in single PDF Format for Pre-Qualification and Technical Specification Qualification:

<b>Envelope No.1</b> (Following documents to be provided as single PDF file)				
<b>SN</b>	<b>Documents</b>	<b>Content</b>	<b>File Types</b>	<b>Submitted (Yes/ No)</b>
1.	Technical Bid (Pre-qualification)	Only manufacturer(s) or their sole authorized distributor / agent are eligible to bid. Authorization letter in the prescribed format from Original Equipment Manufacturer (OEM) in favor of authorized Agent to bid/conclude the order against this tender, must be provided with technical bid. Manufacturer's Authorization Letter as per <i>Annexure-</i>	.PDF	

		<i>II</i> along with a copy of notarised Power of Attorney should also be furnished.		
2.		Declaration Sheet as per <b>Annexure - III</b>		
3.		<i>Certificate of Guarantee/Warranty (on letter head) as per Annexure-IV</i>	.PDF	
4.		The OEM/ authorized distributor / agent should have a minimum 03 (three) years of experience for supply & successful installation of goods of similar specifications and <i>must be successfully completed at least 3 similar purchase orders in IITs/IIITs/NITs/IISER/CSIR/IISc, etc. during last 3 years. Copy of these Purchase orders must be attached with technical bid. List of Govt. Organization/ Deptt. must also be attached as per Annexure-V.</i>	.PDF	
5.		Mandate Form for Electronic Fund Transfer / RTGS Transfer as per <b>Annexure-VI</b>	.PDF	
6.		Compliance Sheet as per <b>Annexure-VII</b>	.PDF	
7.		Technical literature/ leaflets and complete specifications of quoted model(s) along with commercial terms and conditions.	.PDF	
8.		Scanned copy of EMD and it is required to submit the same in original in a sealed envelope at the following address on or before closing date: Officer-In-charge (Stores & Purchase), Office of Stores & Purchase, Institute Building (East), NH-62, Nagaur Road, Karwad, Jodhpur-342037, Rajasthan, Phone: 0291 2801 101, Email: <a href="mailto:sps@iitj.ac.in">sps@iitj.ac.in</a> / In case of exemption from submission of Bid security, proof of registration with NSIC.	.PDF	
9.		Financial statements with net profit, duly audited / certified by Chartered Accountant (CA) of the last three financial years (2016-17, 2017-18 and 2018-19) along with the copies of Income Tax Return (ITR) must be enclosed with the technical bid.	.PDF	
10.		The tenderer viz. the Indian Agents and / or the foreign firms should furnish a certificate that the rates quoted by the tenderer are not more than those quoted to any other Institution in India or abroad during the last one year, with supporting documents.	.PDF	
11.	Technical Bid (Technical Specifications on qualification)	<b>Technical Compliancy certificate:</b> This certificate must be provided indicating conformity to the technical specifications ( <b>Technical Compliance Sheet as per Annexure-I</b> )	.pdf	

	n)			
<b>Envelope No. 2</b>				
<b>S N</b>	<b>Document</b>	<b>Content</b>		
1.	Financial Bid	Price bid should be submitted in BOQ format.	.xls	

**Bid documents should be submitted as per the above sequence with Index page and page numbers (including technical literature). Each page of the bid should be signed & stamped in original. Unsigned bids will not be considered for evaluation. Each point of Envelope-I must be enclosed with the technical bid failing which the bid will not be evaluated. The tender of any tenderer, who has not complied with one or more of the conditions of pre-qualification criteria and technical qualification criteria and / or fail to submit the required documents in prescribed format as mentioned / or required / or conditional tender are liable to be summarily rejected. The technical evaluation is to be done on the basis of the documents of Envelope No.1 mentioned in the above table.**

**8.2 Envelope 2 : “Commercial Bid” shall contain:**

- i. Cost of all the items should be mentioned clearly and individually in the Commercial Offer (Part-II) only. **The L1 will be decided based on a grand total of all items.**
- ii. The prices should be shown against each item for the purpose of Insurance claims / replacements if any.
- iii. List of deliverables / Bill of materials and services.

**Note:**

- (i) No request for extension of due date will be considered under any circumstances.
- (ii) Joint Ventures (JV) are not allowed and no sub-contracting is also allowed with regard to supply, installation, commissioning, and warranty maintenance and after sales service. This is the sole responsibility of the Principals’/their authorized agents.

IIT Jodhpur may issue corrigendum to tender documents before due date of Submission of bid. The bidder is required to read the tender documents in conjunction with the corrigendum, if any, issued by IIT Jodhpur. The bidder is not supposed to incorporate the amendment in the body of the tender document

**8.3 EVALUATION CRITERIA**

Evaluation of Technical bid will be based on the strictly compliance of the documents mentioned in **Envelope No.1.**

- 8.3.1 Even though any bidder may satisfy the above requirements, he/she would be liable to disqualification if he/she has:

- (i) Made misleading or false representation or deliberately suppressed the information in the forms, statements and enclosures required in the eligibility criteria document.
- (ii) Record of poor performance such as abandoning work, not properly completing the contract, or financial failures/weaknesses etc.

### 8.3.2 **BID EVALUATION:**

Based on results of the Technical evaluation IIT Jodhpur evaluates the Commercial Bid of those Bidders who qualify in the Technical evaluation.

- a) IIT Jodhpur shall correct arithmetical errors on the following basis:
  - (i) 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.
  - (ii) 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
  - (iii) If there is a discrepancy between words & figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (i) and (ii) above.
- b) The Vague terms like “packing, forwarding, transportation.....etc. extra” without mentioning the specific amount/percentage of these charges will not be accepted. **Such offers shall be treated as incomplete and rejected.**
- c) After arriving at final pricing of individual offers of all the short listed firms, the lowest firm will be awarded with Contract/Purchase Order.

### 8.3 AWARD OF CONTRACT

#### **Award Criteria**

IIT JODHPUR shall award the contract to the technically qualified eligible BIDDER whose bid has been determined as the lowest evaluated financial bid.

If more than one BIDDER happens to quote the same lowest price and sample of both bidders are technically approved, IIT JODHPUR reserves the right to award the contract to more than one BIDDER or any BIDDER.

- 8.4 The Director, IIT Jodhpur reserves the right to accept the offer in full or in parts or reject summarily or partly.

### 9. PURCHASER’S RIGHT TO VARY QUANTITIES AT THE TIME OF AWARD

- 9.1 IIT JODHPUR reserves the right at the time of award of Contract to increase or decrease the quantity of items specified in the Schedule of Requirements without any change in price or other terms and conditions.

- 9.2 Firms which have already supplied similar items to IIT JODHPUR and have not completed required installation/after sales service/ warranty replacements etc. such firms offers will not be considered for further evaluation and no enquiries thereafter will be entertained.

## 10 CORRUPT OR FRAUDULENT PRACTICES

IIT JODHPUR requires that the BIDDERS who wish to bid for this project have highest standards of ethics.

- 10.1 IIT JODHPUR will reject a bid if it determines that the BIDDER recommended for award has engaged in corrupt or fraudulent practices while competing for this contract.
- 10.2 IIT JODHPUR may declare a vendor ineligible, either indefinitely or for a stated duration, to be awarded a contract if it at any time determines that the vendor has engaged in corrupt and fraudulent practices during the execution of contract
- 11 In case of poor workmanship or if the work / supply is not done in time and in view of exigency of the work/supply, if it is considered necessary to carry out the work / supply by some other means or to assign the work/supply to some other parties due to the failure on the part of the seller, 10 days time will be given to the seller to correct or complete the work / supply failing which the work / supply can be got done by other means at the cost & risks of the seller by allotting a tender at the risk and cost of the defaulting tenderer. The difference in the cost shall be recovered from the original tenderer cost.
- 12 **INSPECTION OF ITEMS:** During the time of manufacturing, IIT Jodhpur inspection team may visit the manufacturer's site to inspect the quality of material viz a viz final product. If any inspected or tested goods fail to conform to the prescribed specifications, the IIT Jodhpur may reject them and the supplier shall either replace the goods or make all alterations necessary to meet specifications free of cost.
- 13 **INTERPRETATION OF THE CLAUSES IN THE TENDER DOCUMENT / CONTRACT DOCUMENT:** In case of any ambiguity / dispute in the interpretation of any of the clauses in this Tender Document, **Director, IIT JODHPUR's interpretation of the clauses shall be final and binding on all parties.**

## 14 CONDITIONS OF CONTRACT

- 14.1 **Concession/Exemptions:** IITJ being an academic institute is entitled for availing GST exemptions and Customs Duty exemptions in terms of Notfn. No. 51/96 dated 23.07.1996, Notfn. No. 28/2003- Customs dt. 01/03/2003, Notfn. No.43/2017- Customs dt. 30/06/2017 & notfn. No. 47/2017- Integrated Tax (Rate) dt. 14/11/2017, Notfn. No. 1012018-Integrated Tax (Rate) dt.25/0/2018 and Notfn. No. 45/2017-Central Tax (rate) dt. 14/11/2017, Notfn. No. 45/2017-Union Territory Tax (Rate) dt. 25/01/2018 as amended from time to time. Presently this is valid till 31.08.2021 vide Order No. TUN/RG-CDE(1145)12016 Dt.2810212018 issued from DSIR-Min. of Sc.& Tech; Govt. of India. Please state clearly that this Certificate is required.
- 14.2 **Performance Bank Guarantee:**  
After the award of work, the supplier shall be required to submit the performance security in the form of irrevocable bank guarantee in the prescribed format (*Annexure-*

VIII) issued by any Nationalised/ Scheduled Bank / or Fixed Deposit Receipt, for an amount equal to the 10% of order value, within 14 days of issue of Purchase Order and **it will be kept valid for a period of 60 days beyond the date of completion of warranty period. Warranty Period will be commenced from the date of the installation of the supplied item. Hence, be careful at the time of calculation of the validity date of Performance Bank Guarantee. The BUYER will forfeit the security deposit if BIDDER fails to execute the order as per the Purchase Order.**

#### 14.3 Performance Benchmarks

The technical evaluation committee needs to be provided with an evaluation system to carry out performance benchmarks.

#### 14.4 Payment Terms:

Payment will be made to the supplier through following modes.

**14.4.1** Indigenous goods: NEFT/Cheque/Demand Draft: After delivery and successful installation and testing at IIT Jodhpur and after submission of performance bank guarantee valid for warranty period + 2 months.

#### 14.4.2 Imported Goods:

**LC:** In Letter of credit (LC), 80% payment will be made through only LC and balance 20% after successful installation and testing at IIT Jodhpur. Also submission of performance bank guarantee for 10% of order value, either by the principal company or by their Indian agent valid for warranty period + 2 months. Bank charges occurred outside India will be borne by the beneficiary.

**Or**

**TT:** 100% payment will be made after delivery and successful Installation and Submission of 10% Performance Security of the order value in the form of Bank Guarantee in the prescribed format issued from any of Nationalized / Scheduled Bank of India for Satisfactory Performance of the contract. The bank Guarantee shall be valid till expiry of the Warranty period with provision for claim period of two (02) months means warranty period + 60 days.

#### 14.5 Delivery & Installation:

**14.5.1** All the goods ordered shall be delivered and installed at Permanent Campus of the Institute, Karwad (NH-62), Nagaur Road, Jodhpur-342037, within **12 weeks** from the date of issue of the purchase order/ date of opening of Letter of Credit. All the aspects of safe delivery and commissioning shall be the exclusive responsibility of the supplier.

**14.5.2 Extension of Delivery & Installation Period:** If the supplier would unable to complete the project / order within the stipulated time, for which the supplier is responsible, it is required to request for the extension of the delivery period before the expiring of the delivery period mentioned in the purchase order, it may be extended with justified reasons. In case the supplier would fail to complete the order within the stipulated time, Institute reserves the right to cancel the contract / order and performance security / EMD may be forfeited.

#### 14.6 **Penalty Clause**

- **For delayed Services / LD:**

As time is the essence of the contract, Delivery period mentioned in the Purchase Order should be strictly adhered to. Otherwise, IIT JODHPUR will forfeit EMD/SD and also LD clause will be applicable /enforced.

If the supplier fails to Supply and install the equipment as per specifications mentioned in the order within the due date, the Supplier is liable to pay liquidated damages of 0.5% of order value per day of delay subject to a maximum of 5% beyond the due date. Such money will be deducted from any amount due or which may become due to the supplier.

IIT JODHPUR reserves the right to cancel the order in case the delay is more than 10 weeks. Penalties, if any, will be deducted from the Invoice.

- **During extension of Letter of Credit (LC)**

In case the delivery date of the contract is extended to take care of delay in supply, for which the supplier is responsible, the tenure of the LC is also to be extended, but the expense incurred for such an extension (of LC) is to be borne by the supplier.

#### 14.7 **Training of Personnel:**

The supplier shall provide the technical training to the personnel involved in the use of the equipment at the Institute premises, immediately after completing the installation of the equipment at the company cost.

#### 14.8 **Site Preparation:**

The supplier shall inform to the Institute about the site preparation, if any, needed for the installation of equipment, immediately after the receipt of the purchase order. The supplier must provide complete details regarding space and all the other infrastructural requirements needed for the equipment, which the Institute should arrange before the arrival of the equipment to ensure its timely installation and smooth operation thereafter.

The supplier shall visit the Institute and see the site whether the equipment is to be installed and may offer his advice and render assistance to the Institute in the preparation of the site and other pre-installation requirements.

#### 14.9 **Merger / Acquisition of Foreign Principal:**

In case of merger of Foreign Principal with another Firm or acquisition of Foreign Principal by another firm, it shall be obligatory for the New Entity so formed after the merger of the Acquiring Firm, as the case may be, to take over all the duties and obligations / liabilities of the Foreign Principal and the New Entity / Acquiring Firm would *ipso facto* become liable for all acts of commission or omission on the part of original Foreign Principal as well as Indian Agent.

#### 14.10 **Change of Indian Agent:**

In case the Foreign Principal changes in Indian Agent then it shall be obligatory for Foreign Principal to automatically transfers all the duties and obligations to the New

Indian Agent, failing which the Foreign Principal would *ipso facto* become liable for all acts of commission or omission on the part of New Indian Agent.

#### 14.11 **Service Manual/Circuit Diagram**

It is specifically required that the bidders will supply all the operating & service manuals and circuit diagrams along with the equipment.

#### 14.12 **Guarantee / Warranty:**

The firm has to be provide Warranty for **Five Years** (5 years) from the date of the satisfactory installation / commissioning of equipment against the defect of any manufacturing, workmanship and poor quality of components and tenderer also give the guarantee / warranty declaration on the letter head in prescribed format as attached with tender as **Annexure - IV**. In case, there is any variation in the warranty as per the specification of the item equipment, the warranty as specified in the specifications shall be final. In case, supplier fails to repair / or rectify the equipment during the warranty / guarantee period, Institute may employ or pay other person/company for repairing the equipment, and all such damages, loss and expenses shall be recovered from the supplier.

**Downtime:** During both warranty period not more than 5% downtime will be permissible. For downtime exceeding 1%, penalty equal to 1/365 of the 5% of the order value per day may be imposed. Downtime will be counted from the date and time of the filing of complaint with in the business hours.

#### 14.13 **Country of origin:**

Country of origin of the quoted item should be mentioned in the offer in case of imported item.

#### 14.14 **Code of Integrity :**

No official of a procuring entity or a bidder shall act in contravention of the codes which includes

- (i) prohibition of
  - a. making offer, solicitation or acceptance of bribe, reward or gift or any material benefit, either directly or indirectly, in exchange for an unfair advantage in the procurement process or to otherwise influence the procurement process.
  - b. any omission , or misrepresentation that may mislead or attempt to mislead so that financial or other benefit may be obtained or an obligation avoided.
  - c. any collusion, bid rigging or anticompetitive behavior that may impair the transparency, fairness and the progress of the procurement process.



- d. improper use of information provided by the procuring entity to the bidder with an intent to gain unfair advantage in the procurement process or for personal gain.
- e. any financial or business transactions between the bidder and any official of the procuring entity related to tender or execution process of contract; which can affect the decision of the procuring entity directly or indirectly.
- f. any coercion or any threat to impair or harm, directly or indirectly, any party or its property to influence the procurement process.
- g. obstruction of any investigation or auditing of a procurement process.
- h. making false declaration or providing false information for participation in a tender process or to secure a contract;

(ii) disclosure of conflict of interest.

(iii) Disclosure by the bidder of any previous transgressions made in respect of the provisions of sub-clause

(i) with any entity in any country during the last three years or of being debarred by any other procuring entity.

14.15 **Indemnity:** The vendor shall indemnify, protect and save IIT JODHPUR against all claims, losses, costs, damages, expenses, action suits and other proceeding, resulting from infringement of any law pertaining to patent, trademarks, copyrights etc. or such other statutory infringements in respect of all the materials supplied by him.

14.16 **Insurance:** The *equipment* to be supplied will be insured by the vendor against all risks of loss or damage from the date of shipment till such time it is delivered at IIT JODHPUR site.

14.17 **Service Facility:** Bidder should mention about the service set up in India and how capable they are to provide after sales services.

14.18 **Banker's details:** Name and address of the banker of your company should be mentioned (*Annexure-VI*).

14.19 **Reference of supply:**

Name and contact details of the premier educational Institutes (*IITs/IIITs/NITs/IISER/CSIR/IISc, etc.*) where the quoted equipment has been installed in India should be enclosed. Copies of at least three purchase orders may be attached. IIT Jodhpur reserves the right to inspect the equipment for its actual performance in any of the listed Institute.

14.20 **Acceptance of Terms & Conditions:**

Bidders must confirm the acceptance of all the terms and conditions of this NIQ. Any non-acceptance or deviations from the terms and conditions must be clearly mentioned.

However, tenderers must note carefully that any conditional offer or any deviation from the terms and conditions of this NIQ may render the quotation liable for rejection. IITJ does not bind itself to accept the lowest of any tender and reserves the right to reject any or all tenders.

Note: The Director, IIT Jodhpur reserves the right to accept/reject any or all tenders and also to reject.

**14.21 Force Majeure:**

The Supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

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

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

**14.22 Arbitration and Laws:**

In case of any dispute or difference arising out of or in connection with the tender conditions / order and Contract, the Institute and the Supplier will address the dispute / difference for a mutual resolution and failing which, the matter shall be referred for arbitration to a sole Arbitrator to be appointed by the Institute. The Arbitration shall be held in accordance with the provisions of the Arbitration and Conciliation Act, 1996 and the venue of arbitration shall be at Jodhpur only. The resolution of the Arbitrator shall be final and binding on both the parties.

**14.23 Jurisdiction:**

The courts at Jodhpur alone will have the jurisdiction to try any matter, dispute or reference between parties arising out of this tender / contract. It is specifically agreed that no court outside and other than Jodhpur court shall have jurisdiction in the matter.

## TECHNICAL COMPLIANCE SHEET

S. No.	Technical Specifications for Chemical Reactor Unit with Accessories	Technical Compliance (Yes/No)
	Fully Computer Controlled Chemical Reactor Unit with SCADA and PID Control providing services for operating the different reactor types (i) continuous stirred tank reactor; (ii) tubular reactor, batch reactor; (iv) plug flow reactor; (v) laminar flow reactor; with following items and specifications:	
(i)	Hot water recycling unit to control the temperature of reactions.	
(ii)	Anodized aluminum panels and structure of painted steel with main metallic elements in stainless steel.	
(iii)	Diagram in the front panel with similar distribution to the elements in the real unit.	
(iv)	Reactor vessels should be transparent to allow the student good visibility of the experiments.	
(v)	Computer controlled three-roller peristaltic dosing pumps (2 nos.) with variable speed, giving flow rate up to 3 litres per hour (unit standard disposition) for pumping the reagents. With another disposition, they should reach a flow rate up to 10 litres per hour (LPH).	
(vi)	Computer controlled thermostatic bath of 6 litres capacity and temperature PID control of the thermostatic bath to maintain reactor temperature.	
(vii)	Pump of 3 Litre per Minute (LPM) capacity with flow sensor (Range: 0.25 to 6.5 LPM) to transfer water from the bath to the reactor.	
(viii)	Two tanks for the reagents, of 2 Litre (L) capacity, each made of pyrex glass along with supply for the reagents. Location position in the chemical reactor unit for the two standard 2.5 litre chemical storage bottles for the reagents within the plinth.	
(ix)	Instrumentation for temperature ('K' type thermocouples for the reactor contents and hot water) and conductivity measurements displaying values on the computer screen. Three 'K' type temperature sensors, one to measure the thermostatic bath temperature in a continuous manner and two sensors to know the water temperature of the thermostatic bath water inlet and outlet. An input for a third user supplied sensor should also be provided for project work.	
(x)	An easy mounting position for the reactor/ accessory to be used and quick connectors with shut-off valve that enable an easy coupling of the service unit to the chosen reactor. Fittings should be quick release type. Quick and easy to handle accommodation and exchange system of the reactors,	
(xi)	Sensors and instrumentation. A dual range conductivity sensor should be provided.	

	An algorithm for the saponification reaction linking the degree of conversion of the reactions to the electrical conductivity may be used, allowing the progress of the reaction to monitored using the software.	
(xii)	Glass feed vessels and the reactants.	
(xiii)	Computer software with provision for varying speed and flow rate of the feed pumps, heater power in the hot water, switch on and off the hot water pump, control the speed of the stirrers used in reactors; and to implement a PID control loop for ensuring stable temperatures.	
(xiv)	The unit should be fully computer controlled via an integral USB interface with data logging as standard. Educational software specific to each reactor type must be supplied. With this software, there should also be the 'drivers' required to allow other software applications to communicate with the unit so that users can use their own software as well.	
(xv)	The control of the reaction should be carried out by a conductivity sensor, allowing reaction evolution parameterization in real time.	
(xvi)	Chemical reactor unit should be equipped with all services for the operation of each reactor,	
(xvii)	All elements of the unit should be chemically resistant.	
(xviii)	Floor standing columns for positioning plug flow reactor etc next to Chemical reactor unit, should be supplied.	
(xix)	A computer of appropriate configuration to drive the chemical reactor unit should be supplied. The computer should have a spare USB port and run a Windows Operating System (32 bit) or as required by the chemical reactor unit.	
(xx)	Thermostatically controlled chilling water circulating unit.	
(xxi)	Six port injection valve.	
(xxii)	Overall Dimensions (approx): Height (mm): 1000, Width (mm): 800, Depth (mm): 800; Gross weight (kg): 50.	
(xxiii)	Unit shall be supplied with manuals for required services, assembly and installation, interface and control software, start-up and shut down procedures, operation and maintenance, calibration and practice manuals.	
(xxiv)	The software should allow the user to vary the feed pump speeds and flow rates, to vary the heater power in the hot water, to implement a PID control loop ensuring stable temperatures, switch on and off the hot water pump, and to control the speed of the stirrers used on some of the reactors.	
(xxv)	<b>Data Acquisition Board (DAB)</b> DAB is a part of the SCADA system. Analog input: Number of channels= 16 single-ended or 8 differential. Resolution=16 bits, 1 in 65536. Sampling rate up to: 250 KS/s (kilo samples per second). Input range (V)= $\pm 10$ V. Data transfers=DMA, interrupts,	

	<p>programmed I/O. DMA channels=6. Analog output: Number of channels=2. Resolution=16 bits, 1 in 65536. Maximum output rate up to: 900 KS/s. Output range(V)= <math>\pm 10</math> V. Data transfers=DMA, interrupts, programmed I/O. Digital Input/Output: Number of channels=24 inputs/outputs. D0 or DI Sample Clock frequency: 0 to 100 MHz.</p>	
(xxvi)	<p><b>Continuous Stirred Tank Reactor (CSTR) with stainless steel coil and variable speed agitator and baffles, with following specifications and capabilities:</b></p> <ul style="list-style-type: none"> <li>○ Computer controlled, small scale demonstration version of CSTR for educational use, designed to demonstrate the behavior of a reactor used for homogeneous liquid-liquid reactions.</li> <li>○ Should be designed for use with the service unit and should therefore allow full computer control with data logging as standard, and have educational software as an optional accessory.</li> <li>○ Should have demonstration capabilities like (a) effect of residence time on conversion, (b) determination of reaction rate constant, (c) residence time distribution, (d) evaluation of empirical expressions from experimental data, (e) effect of temperature on reaction rate, (f) effect of mixing on reaction rate, (g) effect of flow rate on conversion.</li> <li>○ Anodized aluminum structure and panel of painted steel.</li> <li>○ Main metallic elements in stainless steel.</li> <li>○ Diagram in the front panel with similar distribution to the elements in the real unit.</li> <li>○ Reactor body made of borosilicate glass, with a maximum capacity of 2 Litre, specially designed to work in continuous mode. It should also allow batch operation.</li> <li>○ Adjustable holdup volume from 0.4 to 1.5 Litre using an adjustable standpipe.</li> <li>○ Stainless steel heat transfer coil (5 loops of 60 mm diameter) and a removable baffle for temperature control of reactor from the hot water supply on the service unit, or cold water from a chilled water circulating unit.</li> <li>○ Computer controlled stirring system with speed control to improve the mixing and indication with stirrer range 0-220 rpm.</li> <li>○ Reactor lip with connectors for the appropriate sensors.</li> <li>○ Temperature sensor 'K' type to control the temperature in the reactor.</li> <li>○ Conductivity cell to control the reaction with measurement range up to 20 ms.</li> <li>○ Quick connectors with shut-off valve that enable an easy coupling of the reactor to the main reactor service unit.</li> <li>○ All the elements of this unit are chemically resistant.</li> <li>○ Unit shall be supplied with manuals for required services, assembly and installation, interface and control software, start-up and shut down procedures, operation and maintenance, calibration and practice manuals.</li> <li>○ Computer control+Data Acquisition+Data Management software for CSTR. The three software as a part of SCADA system, compatible with actual Windows Operating Systems, graphic and intuitive simulation of the process on the computer screen, compatible with the industry standards, registration and visualization of all process variables in an automatic and simultaneous way, flexible open and multi-control</li> </ul>	

	<p>software, developed with actual windows graphic systems, acting simultaneously on all process parameters.</p> <ul style="list-style-type: none"> <li>○ Analog and digital PID control.</li> <li>○ PID menu and set point selection required in the whole work range.</li> <li>○ Management, processing, comparison and storage of data.</li> <li>○ Sampling velocity up to 250KS/s (Kilo Samples per Second).</li> <li>○ Calibration system for the sensors involved in the process.</li> <li>○ The unit should allow the registration of the alarms state and the graphic representation in real time, comparative analysis of the obtained data, after the process and modification of the conditions during the process.</li> <li>○ The unit should use the saponification reaction and use conductivity to measure the progress of the reaction.</li> <li>○ The unit should use a step input change experiment to obtain the residence time distribution.</li> <li>○ The vessel should be equipped with a variable speed square blade turbine agitator.</li> <li>○ When in use the unit should be wholly contained on the service unit.</li> <li>○ Open software, allowing the teacher to modify texts and instructions. Teacher's and student's passwords to facilitate the teacher's control on the student, and allowing the access to different work levels.</li> <li>○ This unit should allow the 30 students of the classroom to visualize simultaneously all the results and the manipulation of the unit, during the process, by using a projector or an electronic whiteboard.</li> <li>○ Dimensions (approx.): (330 x 330 x 500) mm. Weight (approx.): 10 Kg.</li> </ul>	
(xxvii)	<p><b>Tubular Reactor:</b></p> <ul style="list-style-type: none"> <li>○ Reactor should be made by a continuous tube. The reagents are introduced from the coil-end and the products are obtained through the inverse end. It should be designed for use with the service unit and should therefore allow full computer control with data logging as standard, and have educational software as an optional accessory.</li> <li>○ Should have demonstration capabilities like (a) determination of reaction rate constant, (b) investigation of effect of throughput on conversion, (c) demonstration of the temperature dependence of the reaction and the rate constant, (d) determination of the residence time distribution, (e) effect of flow rate on conversion.</li> <li>○ Anodized aluminum structure and panel of painted steel.</li> <li>○ Main metallic elements in stainless steel.</li> <li>○ Diagram in the front panel with similar distribution to the elements in the real unit.</li> <li>○ Tubular flow reactor of volume 0.4 Litre. Coil shaped. Placed in an acrylic vessel through which the cooling or heating medium circulates. Coil length of 20 metres.</li> <li>○ Two stainless steel heat exchanger coils should be used to bring the reactants up to the reaction temperature separately before they are mixed.</li> <li>○ Electric pre-heater of 12 loops, and loop diameter of 70 mm approx., for the two Feed-lines of reagents. It is placed before the mix and the currents inlet to the reactor.</li> <li>○ Temperature controlled by water jacketed.</li> </ul>	

	<ul style="list-style-type: none"> <li>○ Two temperature sensors "K" type to know the reagents outlet temperature from the pre-heater.</li> <li>○ Conductivity cell to control the reaction. Measurement range up to 20 mS.</li> <li>○ Reactor lip with connectors for the appropriate sensors.</li> <li>○ Quick connectors with shutoff valve that enable an easy coupling of the reactor to the Service Unit.</li> <li>○ The temperature probe and conductivity probe, supplied with the service unit, should be capable of being positioned in the reactor vessel using fitting points.</li> <li>○ The unit should use the saponification reaction and use conductivity to measure the progress of the reaction.</li> <li>○ All the elements of this unit should be chemically resistant.</li> <li>○ The unit should be supplied with manuals for (i) Required Services, (ii) Assembly and Installation, (iii) Interface and Control Software, (iv) Starting-up, (v) Safety, (vi) Maintenance, (vii) Calibration, (viii) Practices Manuals.</li> <li>○ Computer Control Software:Computer Control+Data Acquisition+Data Management Software for Tubular Flow Reactor (QRTC), the three softwares as part of the SCADA system compatible with actual Windows operating systems. Graphic and intuitive simulation of the process on the computer screen. Compatible with the industry standards. Registration and visualization of all process variables in an automatic and simultaneous way. Flexible, open and multi-control softwares, developed with actual windows graphic systems, acting simultaneously on all process parameters.</li> <li>○ Analog and digital PID control. PID menu and set point selection required in the whole work range.</li> <li>○ Management, processing, comparison and storage of data.</li> <li>○ Sampling velocity up to 250 KS/s (kilo samples per second).</li> <li>○ Calibration system for the sensors involved in the process.</li> <li>○ It should allow the registration of the alarms state and the graphic representation in real time.</li> <li>○ Comparative analysis of the obtained data, after the process and modification of the conditions during the process.</li> <li>○ Open software, allowing the teacher to modify texts, instructions. Teacher's and student's passwords to facilitate the teacher's control on the student, and allowing the access to different work levels.</li> <li>○ The unit should allow the 30 students of the classroom to visualize simultaneously all the results and the manipulation of the unit, during the process, by using a projector or an electronic whiteboard.</li> <li>○ Dimensions and weight (approx.):(330 x 350 x 500) mm; 15 Kg.</li> </ul>	
(xxviii)	<p><b>Batch Reactor:</b></p> <ul style="list-style-type: none"> <li>○ Small scale Batch Reactor, computer controlled, designed for the kinetic study of homogeneous reactions liquid-liquid, both in adiabatic conditions and in isothermal conditions.</li> <li>○ Should be designed for use with the service unit and should therefore allow full computer control with data logging as standard, and have educational software as an optional accessory.</li> <li>○ Anodized aluminum structure and panel of painted steel.</li> </ul>	

	<ul style="list-style-type: none"> <li>○ Main metallic elements in stainless steel.</li> <li>○ Diagram in the front panel with similar distribution to the elements in the real unit</li> <li>○ Should have demonstration capabilities like (a) determination of reaction rate constant, (b) investigation of effect of the reactant concentration on the reaction rate, (c) investigation of the effect of temperature on conversion, (d) study of the temperature variation of an exothermic reaction on an adiabatic operation.</li> <li>○ The reactor body should be an isolated vessel with a stainless steel external casing. The working volume should be 1 Litre.</li> <li>○ Heat transfer coil made of stainless steel and reactor baffle, 5 loops of 60 mm of diameter. The tube internal diameter should be about 6 mm and the external one about 8 mm.</li> <li>○ The chilled water circulation unit accessory should be used for isothermal operation.</li> <li>○ Stirring system should be with speed control and indication, computer controlled. Stirrer range: 0-220 rpm.</li> <li>○ Temperature sensor “K” type to control the temperature into the reactor.</li> <li>○ Conductivity cell to control the reaction. Measurement range up to 20 mS.</li> <li>○ Reactor lip with connectors for the appropriate sensors.</li> <li>○ Quick connectors with shutoff valve that enable an easy coupling of the reactor to the Service Unit.</li> <li>○ All the elements of this unit should be chemically resistant.</li> <li>○ The unit is supplied with manuals for (a) Required Services, (b) Assembly and Installation, (c) Interface and Control Software, (d) Starting-up, (e) Safety, (f) Maintenance, (g) Calibration &amp; (h) Practices.</li> <li>○ Computer Control Software should have Computer Control+Data Acquisition+Data Management Software for Batch Reactor. The three softwares as part of the SCADA system should be compatible with actual Windows Operating Systems. Graphic and intuitive simulation of the process should be on the computer screen. It should be compatible with the industry standards. Registration and visualization of all process variables should be in an automatic and simultaneous way. Flexible, open and multi-control software, developed with actual windows graphic systems, should be acting simultaneously on all process parameters.</li> <li>○ The unit should have analog and digital PID control. PID menu and set point selection is required in the whole work range.</li> <li>○ The unit should have management, processing, comparison and storage of data.</li> <li>○ It should have sampling velocity up to 250 KS/s (kilo samples per second).</li> <li>○ The unit should have calibration system for the sensors involved in the process.</li> <li>○ It should allow the registration of the alarms state and the graphic representation in real time.</li> <li>○ It should have the provision for comparative analysis of the obtained data, after the process and modification of the conditions during the process.</li> <li>○ The unit should have provision for open software, allowing the teacher to modify texts, instructions. It should have the provision for Teacher’s and</li> </ul>	
--	---	--



	<p>student's passwords to facilitate the teacher's control on the student, and allowing the access to different work levels. The unit should allow the 30 students of the classroom to visualize simultaneously all the results and the manipulation of the unit, during the process, by using a projector or an electronic whiteboard.</p> <ul style="list-style-type: none"> <li>○ Dimensions and weight (approx.): (330 x 350 x 500) mm; 15 Kg.</li> </ul>	
(xxix)	<p><b>Plug Flow Reactor</b></p> <ul style="list-style-type: none"> <li>○ Small scale Plug Flow Reactor, computer controlled, designed to demonstrate the flow pattern characterization and the steady state conversion in a tubular reactor with axial dispersion.</li> <li>○ Should be designed for use with the service unit and should therefore allow full computer control with data logging as standard, and have educational software as an optional accessory.</li> <li>○ Should demonstrate both flow pattern characterization and steady state conversion in a packed tubular reactor with axial dispersion.</li> <li>○ Should have demonstration capabilities, such as (i) determination of the residence time distribution of the reactor, (ii) study of the reactor response to different perturbations: step and pulse change, (iii) effect of flow rate and feed concentration on the determination of flow pattern, (iv) Demonstration of flow pattern in the reactor and comparison with the theoretical model, (v) Determination of the steady state conversion of a second order reaction, (vi) Effect of flow rate and feed concentration on the steady state conversion, (vii) Visual demonstration of the reactor response with tracer techniques, (viii) Visual monitoring of the steady state conversion for a chemical reaction.</li> <li>○ The unit should be able to demonstrate tracer experiments and conversion experiments.</li> <li>○ The reactor column should be 1100 mm long with a 1 litre working volume.</li> <li>○ The glass bead in the reactor column should have a diameter of 3 mm.</li> <li>○ The reactor column should be made of clear acrylic and be mounted on a steel frame.</li> <li>○ A clear acrylic sensor block should be mounted on the frame to house the conductivity and temperature sensors.</li> <li>○ The reagents should be fed to the reactor by the feed pumps, using PTFE tubing.</li> <li>○ Anodized aluminum structure and panels of painted steel.</li> <li>○ Main metallic elements in stainless steel.</li> <li>○ Diagram in the front panel with similar distribution to the elements in the real unit.</li> <li>○ At the bottom of the column a pre-mixer should be provided for facilitating a complete mixing of the reagents entering the reactor and improving the flow distribution.</li> <li>○ The unit should have a 6 ways injection valve, which allows either the feeding of reagents in a continuous way or the possibility to carry out pulse and step changes to characterize the flow pattern.</li> <li>○ Temperature sensor "K" type should be provided.</li> </ul>	

	<ul style="list-style-type: none"> <li>○ Conductivity cell should be provided to control the reaction. Measurement range up to 20 mS.</li> <li>○ Quick connectors with shutoff valve that enable an easy coupling of the reactor to the Service Unit.</li> <li>○ All the elements of this unit should be chemically resistant.</li> <li>○ The unit should be supplied with manuals for: (i) Required Services, (ii) Assembly and Installation, (iii) Interface and Control Software, (iv) Starting-up, (v) Safety, (vi) Maintenance, (vii) Calibration &amp; (viii) Practices.</li> <li>○ Computer Control Software: The unit should be supplied with Computer Control+Data Acquisition+Data Management Software for Plug Flow Reactor (QRPC), as a part of SCADA system. The three softwares are part of the SCADA system. Compatible with actual Windows operating systems. Graphic and intuitive simulation of the process on the computer screen. Compatible with the industry standards. Registration and visualization of all process variables in an automatic and simultaneous way. Flexible, open and multi-control software, developed with actual windows graphic systems, acting simultaneously on all process parameters.</li> <li>○ Analog and digital PID control. PID menu and set point selection required in the whole work range. Management, processing, comparison and storage of data.</li> <li>○ Sampling velocity up to 250 KS/s (kilo samples per second).</li> <li>○ Calibration system for the sensors involved in the process.</li> <li>○ It should allow the registration of the alarms state and the graphic representation in real time.</li> <li>○ The unit should be capable of doing comparative analysis of the obtained data, after the process, and modification of the conditions during the process.</li> <li>○ Open software, allowing the teacher to modify texts, instructions. Teacher's and student's passwords to facilitate the teacher's control on the student, and allowing the access to different work levels.</li> <li>○ The unit should allow the 30 students of the classroom to visualize simultaneously all the results and the manipulation of the unit, during the process, by using a projector or an electronic whiteboard.</li> <li>○ Dimensions and weight (approx.): 330 x 330 x 1350 mm; 25 Kg.</li> </ul>	
(xxx)	<p><b>Laminar Flow Reactor</b></p> <ul style="list-style-type: none"> <li>○ Small scale Laminar Flow Reactor, computer controlled.</li> <li>○ Should be designed for use with the service unit and should therefore allow full computer control with data logging as standard, and have educational software as an optional accessory.</li> <li>○ Should demonstrate both flow pattern characterization and steady state conversion in a packed tubular reactor with axial dispersion.</li> <li>○ Should have demonstration capabilities, such as (i) determination of the residence time distribution of the reactor, (ii) study of the reactor response to different perturbations: step and pulse change, (iii) effect of flow rate and feed concentration on the determination of flow pattern, (iv) Effect of</li> </ul>	

	<p>the temperature on the laminar flow characterization, (v) Demonstration of flow pattern in the reactor and comparison with the theoretical model, (vi) Determination of the steady state conversion of a second order reaction, (vii) Effect of flow rate and feed concentration on the steady state conversion, (viii) Visual demonstration of the reactor response with tracer techniques, (ix) Visual monitoring of the steady state conversion for a chemical reaction.</p> <ul style="list-style-type: none"> <li>○ The reactor column should be 1100 mm long with a 1 litre working volume.</li> <li>○ The glass bead in the reactor column should have a diameter of 3 mm.</li> <li>○ The reactor column should be made of clear acrylic and be mounted on a steel frame.</li> <li>○ A static premixer should be used to provide pre-mixing of the reagents entering the reactor and hence improve the flow distribution.</li> <li>○ The unit should include two reagent vessels fitted with heat exchangers, mounted in the service unit plinth.</li> <li>○ A cold water jacket should be used to keep the reactor contents at constant temperature in order to maintain the laminar characteristic. The chilled Water accessory is required for this.</li> <li>○ A clear acrylic sensor block should be mounted on the frame to house a conductivity and temperature sensors.</li> <li>○ The reagents should be fed to the reactor by the service unit's feed pumps, using PTFE tubing.</li> <li>○ A 6 port injection valve should be fitted to the service unit, which is used to provide the step or pulse input changes of the reagents.</li> <li>○ A feed assembly should be supplied with reactor which consists of a 6 port injection valve mounted on a base plate and a feed vessel assembly with heat exchangers for cooling. This should be designed for use with the Chemical Reactors Service unit and the Chilled Water Circulation Unit.</li> <li>○ The unit should be able to demonstrate tracer experiments and conversion experiments.</li> <li>○ A clear acrylic sensor block should be mounted on the frame to house the conductivity and temperature sensors.</li> <li>○ The reagents should be fed to the reactor by the feed pumps, using PTFE tubing.</li> <li>○ Anodized aluminum structure and panels of painted steel.</li> <li>○ Main metallic elements in stainless steel.</li> <li>○ Diagram in the front panel with similar distribution to the elements in the real unit.</li> <li>○ The unit should be capable of doing comparative analysis of the obtained data, after the process, and modification of the conditions during the process.</li> <li>○ Open software, allowing the teacher to modify texts, instructions. Teacher's and student's passwords to facilitate the teacher's control on the student, and allowing the access to different work levels.</li> <li>○ The unit should allow the 30 students of the classroom to visualize simultaneously all the results and the manipulation of the unit, during the</li> </ul>	
--	--	--

	<p>process, by using a projector or an electronic whiteboard.</p> <ul style="list-style-type: none"> <li>○ Dimensions and weight (approx.): 330 x 330 x 1350 mm; 25 Kg.</li> </ul>											
(xxxii)	<p><b>Chilled Water Circulating Unit</b></p> <p>The chilled water circulator should consist of a water vessel, a self-contained refrigeration system, a heat transfer coil with circulating pump, additional four heat transfer coils and thermostat. The water in the water vessel is chilled by the refrigeration system to provide a bank of ice. After the ice bank has been built up, fluid can be passed through the heat transfer coil to provide a chilled water supply. Heat is transferred from the fluid within the coil to the ice bank until the ice has melted. When the thermostat is in use, a temperature will be set up, water will be recirculated until the established temperature and refrigeration system thus cooling down the water. When set point is reached, the thermostat and refrigeration system, including the fan, will stop and water will continue being recirculated to maintain the system at the established temperature. Technical Specifications of the chilled water circulating unit is given as following:</p> <table border="1"> <tr> <td>Type of refrigerator</td> <td>R134a</td> </tr> <tr> <td>Circulating pump flow rate</td> <td>13 litres/ min (LPM)</td> </tr> <tr> <td>Pump head</td> <td>0.63 bar (6.3 m of water column)</td> </tr> <tr> <td>Dimension (approx)</td> <td>250 mm H x 560 mm W x 380 mm D</td> </tr> <tr> <td>Electrical voltage</td> <td>13A , 220V, Phase, 50 Hz</td> </tr> </table>	Type of refrigerator	R134a	Circulating pump flow rate	13 litres/ min (LPM)	Pump head	0.63 bar (6.3 m of water column)	Dimension (approx)	250 mm H x 560 mm W x 380 mm D	Electrical voltage	13A , 220V, Phase, 50 Hz	
Type of refrigerator	R134a											
Circulating pump flow rate	13 litres/ min (LPM)											
Pump head	0.63 bar (6.3 m of water column)											
Dimension (approx)	250 mm H x 560 mm W x 380 mm D											
Electrical voltage	13A , 220V, Phase, 50 Hz											
(xxxiii)	<p><b>Cables and Accessories</b>, for normal operation.</p>											
(xxxiiii)	<p><b>Industrial Control using PLC</b> (it includes PLC-PI Module plus PLC-SOF Control Software)</p> <p>This unit should be common for the Chemical Reactors and should work with one or several reactors. It should have circuit diagram in the module front panel. Front panel should have Digital inputs (X) and Digital outputs (Y) block: 16 Digital inputs, activated by switches and 16 LEDs for confirmation (red). 14 Digital outputs (through SCSI connector) with 14 LEDs for message (green). Analog inputs block: 16 Analog inputs (-10 V. to + 10 V.) (through SCSI connector). Analog outputs block: 4 Analog outputs (-10 V. to + 10 V.) (through SCSI connector).</p>											
(xxxv)	<p><b>Touch screen:</b></p> <p>High visibility and multiple functions. Display of a highly visible status. Recipe function. Bar graph function. Flow display function. Alarm list.</p> <p>Multi language function. True type fonts.</p> <p>Back panel: Power supply connector. Fuse 2A. RS-232 connector to PC. USB 2.0 connector to PC.</p> <p>Inside: Power supply outputs: 24 Vdc, 12 Vdc, -12 Vdc, 12 Vdc variable.</p> <p>Panasonic PLC: Program capacity of 32 Ksteps, with a sufficient comment area.</p> <p>Power supply input (100 to 240 V AC).</p> <p>DC input: 16 (24 V DC). Relay output: 14.</p>											

	<p>High-speed counter. Multi-point PID control.          Digital inputs/outputs and analog inputs/outputs Panasonic modules.          Communication RS232 wire to computer (PC).          Dimensions: 490 x 330 x 310 mm. approx. Weight: 30 Kg. approx.</p>	
(xxxv)	<p>QRC/PLC-SOF. PLC Control Software: should be included with PLC supply.          Each Chemical Reactor should have its own Software.</p>	
(xxxvi)	<p><b>Computer Aided Instruction Software System</b>          The software package should consist of an Instructor Software (INS/SOF) totally integrated with the Student Software (QRC/SOF).  <i>INS/SOF Classroom Management Software (Instructor Software):</i> The Instructor should be able to organize students by classes and groups, create easily new entries or delete them, create data bases with student information, analyze results and make statistical comparisons, generate and print reports, detect student's progress and difficulties.  <i>QRC/SOF. Computer Aided Instruction Software (Student Software):</i> It should explain how to use the unit and run the experiments. This Software should contain:          Theory, Exercises, Guided Practices, Examinations.</p>	
(xxxvii)	<p><b>QRC/FSS. Faults Simulation System:</b>          Faults Simulation System (FSS), a Software package, should simulate several faults in Computer Controlled Unit. The "FAULTS" mode should consist of causing several faults in the unit normal operation. The student must find them and solve them. There are several kinds of faults:          (a) Faults affecting the sensors measurement:          - An incorrect calibration is applied to them.          - Non-linearity.          (b) Faults affecting the actuators:          - Actuators channels interchange at any time during the program execution.          - Response reduction of an actuator.          (c) Faults in the controls execution:          - Inversion of the performance in ON/OFF controls.          - Reduction or increase of the calculated total response.          - The action of some controls is annulled.          (d) On/off faults:          - Several on/off faults can be included.</p>	
(xxxviii)	<p><b>QRC/CAL. Computer Aided Learning Software (Results Calculation and Analysis):</b>          This Computer Aided Learning Software (CAL) should be a Windows based software, simple and easy to use.          CAL is a class assistant that helps in doing the necessary calculations to extract the right conclusions from data obtained during the experimental practices.          CAL computes the value of all the variables involved and performs the calculations.          It allows to plot and print the results. Within the plotting options, any variable can be represented against any other.          Different plotting displays.          It has a wide range of information, such as constant values, unit conversion factors and integral and derivative tables.</p>	
(xxxix)	<p><b>SCADA-Net System.</b>          SCADA-Net System should allow up to 30 students to work with a Teaching Unit in any laboratory, simultaneously. The Mini ESN system should consist on the adaptation of any Computer Controlled Unit with SCADA and PID Control integrated in a local network.          This system should allow to view/control the unit remotely, from any computer</p>	

	<p>integrated in the local net (in the classroom), through the main computer connected to the unit.</p> <p>Main characteristics:</p> <ul style="list-style-type: none"> <li>- It should allow up to 30 students to work simultaneously with the Computer Controlled Unit with SCADA and PID Control, connected in a local net.</li> <li>- Open Control + Multicontrol + Real Time Control + Multi Student Post.</li> <li>- It should have the capability that Instructor controls and explains to all students at the same time.</li> <li>- Any user/student should be able to work doing "real time" control/multicontrol and visualisation.</li> <li>- Instructor should be able to see in the computer what any user/student is doing in the unit.</li> <li>- Continuous communication between the instructor and all the users/students connected.</li> </ul> <p>This system is used with a Computer Controlled Unit. The system should basically consist of:</p> <ul style="list-style-type: none"> <li>- Instructor's computer.</li> <li>- Students' computers.</li> <li>- Local Network.</li> <li>- Unit-Control Interface adaptation.</li> <li>- Unit Software adaptation.</li> <li>- Webcam.</li> <li>- Mini ESN Software to control the whole system.</li> <li>- Cables and accessories required for a normal operation.</li> </ul>	
--	---	--

The details of the model quoted alongwith the technical specifications for which quoted must be submitted. Declaration: I have also enclosed all relevant documents in support of my claims, (as above) in the following pages.

**Signature of Bidder**

**Name:** \_\_\_\_\_

**Designation:** \_\_\_\_\_

**Organization Name:** \_\_\_\_\_

**Contact No. :** \_\_\_\_\_

**FORMAT FOR MANUFACTURER'S AUTHORISATION LETTER TO AGENT (on letter head)**

Ref. No.

Date:

To,  
The Director  
Indian Institute of Technology Jodhpur  
NH-65, Nagaur Road, Karwad, Jodhpur-342037.

**Sub.: Authorization Letter.**

Dear Sir,

We, \_\_\_\_\_, who are established and reputed manufacturers of \_\_\_\_\_, having factory at \_\_\_\_\_, hereby authorize M/s. \_\_\_\_\_ (name & address of Indian distributor /agent) to bid and conclude the order with you for the above goods manufactured by us.

We shall remain responsible for the tender / contract / agreement by the said M/s. \_\_\_\_\_, jointly and severally.

We ensure that we would also support / facilitate the M/s \_\_\_\_\_ on regular basis with technology / product updates for up-gradation / maintains / repairing / servicing of the supplied goods manufactured by us, during the warranty period.

In case duties of the Indian agent / distributor are changed or agent / distributor is changed it shall be obligatory on us to automatically transfer all the duties and obligations to the new Indian Agent failing which we will ipso-facto become liable for all acts of commission or omission on the part of new Indian Agent / distributor.

Yours faithfully,

[Name & Signature]

for and on behalf of M/s. \_\_\_\_\_ [Name of manufacturer]

**Note:** This letter of authorisation should be on the letterhead of the manufacturing concern and should be signed by a person competent and having the power of attorney to bind the manufacturer. A copy of notarised power of attorney should also be furnished.

Only manufacturer(s) or their sole authorized distributor / agent are eligible to bid. Authorization letter in the prescribed format (*Annexure - II*) from Original Equipment Manufacturer (OEM) in favour of authorized Agent to bid / conclude the order against this tender, must be enclosed with technical bid.

## DECLARATION SHEET

We, \_\_\_\_\_ hereby certify that all the information and data furnished by our organization with regard to this tender specification are true and complete to the best of our knowledge. I have gone through the specification, conditions and stipulations in details and agree to comply with the requirements and intent of specification.

This is certified that our organization has been authorized (Copy attached) by the OEM to participate in Tender. We further certified that our organization meets all the conditions of eligibility criteria laid down in this tender document. Moreover, OEM has agreed to support on regular basis with technology / product updates and extend support for the warranty.

The prices quoted in the financial bids are subsidized due to academic discount given to IIT Jodhpur.

We, further specifically certify that our organization has not been Debarred/Black Listed/De Listed or put to any Holiday by any Institutional Agency/ Govt. Department/ Public Sector Undertaking in the last three years and that there is no enquiry going on by CBI/ED/any other Govt. agency against the firm.	NAME & ADDRESS OF THE Vendor/ Manufacturer / Agent
1 Phone	
2 Fax	
3 E-mail	
4 Contact Person Name	
5 Mobile Number	
6 GST Number	
7 Kindly provide bank details of the bidder in the following format: a) Name of the Bank	
b) Account Number	
c) Kindly attach scanned copy of one Cheque book page to enable us to return the EMD to unsuccessful bidder	

(Signature of the Tenderer)

Name:

Seal of the Company



**Certificate of Guarantee/Warranty (on letter head)**

I / We certify that the guarantee / warranty shall be given for a period of **5 (Five) Years** starting from the date of the satisfactory installation, commissioning and handing over of the equipment and the work completed under the contract. During the guarantee / warranty period, I / we shall provide the “after sale service” and the replacement of defective / or any part(s) of the equipment or rectification of defects of work of the equipment will be free of cost. The replacement of the parts shall be arranged by us, at our own cost and responsibility. We undertake that the above guarantee / warranty shall begin only from the date of successful installation. The benefit of change in dates of the guarantee / warranty period shall be in the interest of the user / your organization.

During the guarantee / warranty period, we shall provide atleast **2 preventive maintenance visits per year**.

Uptime Guarantee: During the guarantee / warranty period, we will be responsible to maintain the equipment including all the accessories in the satisfactory faultless working conditions for a period 347 days (i.e. 95% uptime) in a block of 365 days.

- All complaints will be attended by us within 4 working days of receipt of the complaint in our office.
- In case there is delay of more than 4 days in attending the complaint from our side then the Institute can count the number of days in excess of the permissible response time in the downtime. The above said response time of 4 days for attending to a complaint by us will not be counted in the downtime.
- Penalty: We shall pay a penalty equivalent to 0.5 % of the order value of the equipment for every week or part thereof delay in rectifying the defect.

No deduction or advantage of any kind on account of Sundays, half days or Public / Govt. holidays observed by the Institute shall be allowed from the total down time permissible as defined above. The right to accept the reason(s) for delay and consider reduction or waive off the penalty for the same shall be at the sole discretion of the Institute.

I / We shall try to repair the equipment at Institute premises. However, in case it is not possible to repair the equipment at Institute premises, we will take out the equipment to our site on our own expenses. We shall take the entire responsibility for the safe custody and transportation of the equipment taken out for repairs till the equipment is rehabilitated to the Institute after repair. If any loss of equipment occurred during our custody, we will restore it / compensate to Institute for such losses.

I / We guarantee that in case we fail to carry out the maintenance work within the stipulated period, the Institute reserves the right to get the maintenance work carried out at our risk, cost and responsibility after informing us. All the expenses including excess payment for repairs / maintenance shall be adjusted against the Performance Bank Guarantee. In case the expenses exceed the amount of the Performance Bank Guarantee, the same shall be recoverable from us

with / without interest in accordance with the circumstances.

I / We undertake to perform calibration after every major repair / breakdown / taking the equipment out for repair from the Institute premises. I / We guarantee that we will supply spare parts, if and when required on agreed basis for an agreed price. The agreed basis could be an agreed discount on the published catalogue price.

I / We guarantee to the effect that before going out of production of the spare parts, we will give the adequate advance notice to Institute so that Institute may undertake to procure the balance of the life time requirements of the spare parts.

**List of Govt. Organization/Deptt.**

List of Government Organizations for whom the Bidder has undertaken such work during last three years (must be supported with work orders)

Name of the organization	Name of Contact Person	Contact No.

Name of application specialist / Service Engineer who have the technical competency to handle and support the quoted product during the warranty period.

Name of the organization	Name of Contact Person	Contact No.

The OEM/ authorized distributor / agent must be successfully completed at least 3 similar orders in IITs/ IISER/CSIR/IISc during last 3 years. Copy of Purchase order must be attached with technical bid.

Signature of Bidder

Name: \_\_\_\_\_

Designation: \_\_\_\_\_

Organization Name: \_\_\_\_\_

Contact No. : \_\_\_\_\_

**MANDATE FORM FOR ELECTRONIC FUND TRANSFER/RTGS TRANSFER**

Date: / /

To  
The Director  
Indian Institute of Technology Jodhpur  
NH 65 Nagaur Road Karwar 342037

Sub: Authorization for release of payment / dues from Indian Institute of Technology, Jodhpur through Electronic Fund Transfer/RTGS Transfer.

1. Name of the Party/Firm/Company/Institute:

2. Address of the Party:

City \_\_\_\_\_ Pin Code \_\_\_\_\_  
E-Mail ID \_\_\_\_\_ Mob No: \_\_\_\_\_  
Permanent Account Number \_\_\_\_\_

3. Particulars of Bank:

Bank Name:		Branch Name:	
Branch Place:		Branch City:	
PIN Code:		Branch Code:	
MICR No.:			

(9 Digit number appearing on the MICR Bank of the Cheque supplied by the Bank, Please attach a Xerox copy of a cheque of your bank for ensuring accuracy of the bank name , branch name and code number)

IFS Code:(11 digit alpha numeric code)																				
Account Type	Savings				Current				Cash Credit											
Account Number:																				

**DECLARATION**

I hereby declare that the particulars given above are correct and complete. If any transaction delayed and not effected for reasons of incomplete or incorrect information I shall not hold Director, Indian Institute of Technology Jodhpur responsible. I also undertake to advise any change in the particulars

of my account to facilitate updating of records for purpose of credit of amount through NEFT/RTGS Transfer.

Place: \_\_\_\_\_

Date: \_\_\_\_\_

**Signature & Seal of the Authorized Signatory of the Party**

---

Certified that particulars furnished above are correct as per our records

Bankers Stamp:

Date: \_\_\_\_\_

**Signature of the Authorized Official from the Bank**

*N.B: Please fill in the information in CAPITAL LETTERS, computer typed; please TICK wherever it is applicable.*

<b>INDIAN INSTITUTE OF TECHNOLOGY JODHPUR COMPLIANCE SHEET (to be submitted in .PDF)</b>			
<b><u>IMPORTANTNOTE</u></b> THIS STATEMENT SHOULD BE DULY FILLED AND ENCLOSED WITH QUOTATION. NONRECEIPT OF THIS STATEMENT OR INCOMPLETE DETAILS PROVIDED WILL LEAD TO REJECTION OF TENDER			
<b>Tender Enquiry No:</b>			
S. No.	Commercial Aspects	IITJ Terms	Response of the Vendor
1.	Terms of Delivery	FOR/ FOB/ FCA/ Ex-Works	
2.	Terms of Payment	The details of Payment term is mentioned in point no. 15.4	
3.	Mode of Payment	Demand Draft/ Bank Guarantee	
4.	Bank Details for making Payment	To be enclosed	
5.	Validity of Quote	90 days from the date of opening of Tender	
6.	Name of Manufacturer	Name & complete address of the Manufacturer	
7.	Currency in which quoted	Multicurrency	
8.	Delivery Period	12 weeks from effective date of Contract	
9.	No. of Lots	01 lot	
10.	Installation/Supply	IIT Jodhpur, Karwad	
11.	Earnest Money Deposit (EMD)	Rs. 1,00,000/-	
12.	Warranty	5 Years	
13.	Liquidated damages <b>(mandatory requirement, if not accepted quotation will not be considered)</b>	(0.5% of per day maximum upto 5% of the contract value excluding taxes for the delayed period)	
14.	Order to be placed on	complete address with contact details of the supplier	
15.	Customs Duty Percentage Applicable and requirement of Customs Duty Exemption Certificate (CDEC).	Percentage of Customs Duty Applicable to be specified even if CDEC is to be issued by DRL (under Customs notification No.51/96 wherever applicable). No third party CDEC will be Provided	
16.	Applicable GST as per Govt. rules	GST % should be mentioned separately	
17.	Performance cum Warranty Bond	(10 % of the order value) As per tender	

18.	Name & Address of the Firm:		
19.	All the pages of the tender documents to be numbered in numeric (eg. 1,2,3...)		
19.	Compliance (choose any one)	We hereby accept all the terms & conditions/instructions of the tender. Or We hereby accept all the terms & conditions/instructions of the tender except the one mentioned in separate sheet (mention the non- compliance conditions in separate sheet)	
20.	Signature &Name of the authorised signatory with stamp of the firm:		

**Signed & stamped compliance sheet of the technical specification of the goods with technical printed literature along with Bill of Material (BoM) mentioning all the terms & conditions clearly, must be enclosed with the technical bid (*Annexure-VII*).**

**BANK GUARANTEE FORM FOR PERFORMANCE SECURITY**

The Director  
Indian Institute of Technology Jodhpur  
NH 65 Nagaur Road Karwar 342037

WHEREAS..... (Name and address of the Supplier) (herein after called "the Supplier") has undertaken, in pursuance of contract no..... dated ..... (herein after called "the contract") to supply .....

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/nationalized bank recognized by you for the sum specified therein as security for compliance with its obligations in accordance with and due performance of 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 hereby irrevocably and absolutely undertake to pay you immediately, 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.

The Bank guarantee shall be interpreted in accordance with the laws of India. The Guarantor

Bank represents that this Bank Guarantee has been established in such form and with such content that is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.



The Bank Guarantee shall not be affected in any manner by reason of merger, amalgamation, restructuring or any other change in the constitution of the Guarantor Bank or the Supplier. The Bank further undertakes not to revoke this Guarantee during its currency except with the previous express consent of the Buyer in writing.

The Bank declares that it has power to issue this Guarantee and discharge the obligations contemplated herein, the undersigned is duly authorized and has full power to execute this Guarantee for an on behalf of the Bank.

This guarantee shall be valid up to and including the ..... day of ....., 20.....

.....

(Signature with date of the authorised officer of the Bank)

.....

Name and designation of the officer

.....

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