INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH TIRUPATI

Transit campus: C/o Sree Rama Engineering College Campus, Rami Reddy Nagar, Karakambadi Road, Mangalam (B.O), Tirupati - 517 507 **Website: www.iisertirupati.ac.in**

Limited Tender No: IISERT/PUR/0662/19

Date: 06/02/2020

Indian Institute of Science Education and Research, Tirupati invites online bid (e-tender) in **single bid** (Technical + Financial) system for the following.

Item Description: Supply, Installation and Commissioning of Gas Chromatography - Qty 01 No.

The Tender Document can be downloaded from Central Public Procurement (CPP) Portal <u>https://eprocure.gov.in/eprocure/app</u> and bid is to be submitted online only through the E-procurement portal up to the last date and time of submission of tender.

Critical Dates of Tender

SFR

Sr.No	Particulars	Date	Time	
1	Date of Online Publication/Download of Tender	06/02/2020	15:00 Hrs.	
2	Bid Submission Start Date	06/02/2020	18:30 Hrs.	
3	Bid Submission Close Date	19/02/2020	15:00 Hrs.	
4	Opening of Bids	20/02/2020	15:30 Hrs.	

No manual bids will be accepted. All quotation should be submitted in the Eprocurement portal only

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, +91-8826246593.



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CHAPTER-1. INVITATION FOR BIDS

1. Indian Institute of Science Education and Research, Tirupati invites online bids (etender) in single bids systems for Supply, Installation and Commissioning of Gas Chromatography. The Technical specifications are given in **Chapter 4: Schedule of Specifications**.

2. **Contact for information**:

Technical & Commercial contact: Assistant Registrar (Admin & Purchase) Indian Institute of Science Education and Research (IISER), Tirupati Transit campus: C/o Sree Rama Engineering College Campus, Rami Reddy Nagar, Karakambadi Road, Mangalam (B.O), Tirupati - 517 507 Email: <u>purchase@iisertirupati.ac.in</u> Ph.: 0877 2500208 Website: <u>www.iiserTirupati.ac.in</u>

3. Supply means: "Supply, Installation & Commissioning".

4. **Submission of Bid**:

 Bid Submission Start Date:
 06/02/2020 from 18:30Hrs.

 Bid Submission Close Date:
 19/02/2020 up to 15:00Hrs.

 Opening of Bids:
 20/02/2020 at 15:30 pm

- 5. No manual bids will be accepted. All quotation should be submitted in the Eprocurement portal only
- 6. The Offer should comprise of the following:
 - (i) The offer should be complete to indicate that all products and services asked for are quoted.
 - (ii) The purpose of certain specific conditions is to get or procure best Equipment/service etc. for IISER, Tirupati. The decision of Purchase Committee shall be the guiding factor for selection of the responsive firms.
 - (iii) Duly filled in Bid with proper seal and signature on each page of the bid should be submitted online and the same should accompany with complete specifications, Manufacturer's name, address and relevant Technical Literature / Brochures with warranty Terms.
 - (iv) Agreements / Purchase Orders / Completion certificates if any, for similar works in other Institutes, the details of such supplies for the preceding three years should be given together with the prices eventually or finally paid.
 - (v) Copy of GST No. and PAN No. allotted by the concerned authorities. If registered with the National Small Industries Corporation, the registration



number, purpose of registration and the validity period of registration and a copy of DGS&D registration wherever it is applicable should also be provided in bid.

- (vi) The prices should be shown against each item for the purpose of Insurance claims / replacements if any.
- (vii) Compliance sheet with any deviation with reference to the terms and specifications.
- (viii) The item should be supplied with manuals and the manuals including technical drawings should be complete in all respects to operate without any problem.
- (ix) Duly filled in checklist as per Chapter 6 should be submitted along with tender.
- (x) The Bidders are requested to quote for Educational Institutional Price for Equipment's, since we are eligible for the same

Note : IISER , Tirupati is requesting only Single Bid (Technical Specification and Price together) the Bidders must be extremely careful about the requirement mentioned in the tender and submit their quotes accordingly. Any shortfalls found during the tender evaluation such bids will be rejected without seeking any further clarifications from the bidders. Since it is a single bid any further clarification will cause/draw objections from other bidders.

All the bidders should quote their offer as per "Chapter - 5 Price Schedule" for uniformity.

7. **Purchase Committee**

The Purchase Committee will evaluate the tenders and may also nominate some external/expert members, in the interest of IISER, Tirupati.

8. **Terms of the Purchase Committee**

- (i) A committee duly constituted by the Director, IISER, Tirupati will go through the bids and recommend firms that are meeting all the specifications of the Tender. The recommendation/decision of the purchase committee is the final and binding on all the parties.
- (ii) Purchase Committee will proceed through Bids as defined in <u>Chapter IV</u> <u>(Schedule of requirements, specifications and allied technical details)</u>, in order to determine whether they are substantially responsive to the requirements set forth in the tender. In order to reach such a determination, IISER, Tirupati will examine the information supplied by the Bidders, and shall evaluate the same as per the specifications mentioned in this tender.



(ii) The purchase committee may formulate evaluation criteria in addition to the specifications and requirements indicated in the tender, in the interest of IISER, Tirupati.

9. **Comparison of Responsive bids:**

- (i) After opening the bids, the responsive offers will be tabulated with reference to the specification.
- (ii) After arriving at final pricing of individual offers of all the short listed firms, the lowest firm will be awarded with Contract/Purchase Order subject to availability of funds.
- 10. No request for extension of due date will be considered under any circumstances.
- 11. No sub-contracting is allowed with regard to installation, warranty maintenance and after sales service.
- 12. The Director, IISER, TIRUPATI reserves the right to accept the offer in full or in parts or reject summarily or partly.
- 13 The relatives / near relatives of employees of the client are prohibited from participation in this bid.

The near relatives for this purpose are defined as:

(a) Members of a Hindu Undivided Family.

(b) Their husband or wife.

(c) The one is related to the other in the manner as father, mother, son(s), son's wife (daughter-in-law), daughter(s) & daughter's husband (son-in-law), brother(s) & brother's wife, sister(s) and sister's husband (brother-in-law).

14. Unloading: In Case of Equipment unloading at IISER Tirupati will be under supplier scope



CHAPTER-2 : INSTRUCTIONS TO BIDDERS

Delivery Period / Timeliness

The deliveries & installation must be completed **within 30 days**, after placement of purchase order. The time is the essence of the contract. It is mandatory for the bidders who respond to this bid to meet these expectations, as are tightly linked to IISER, TIRUPATI's plans of completing the project within the time frame.

Locations for the Supply / Services:

: Supply, Installation and Commissioning of Gas Chromatography covered by this document is required to be done at IISER, Tirupati.

1. **Eligible Bidders:**

- 1.1 IISER, TIRUPATI reserves the right to award / reject the order to any particular bidder without assigning any reason thereof.
- 1.2 Bidders should not be under a declaration of ineligibility for corrupt and fraudulent practices.
- 1.3 Bidders should QUOTE strictly in accordance with the requirements.
- 1.4 Bidders shall adhere to the procedure and processes laid down in this document and shall follow fair and ethical practices of trade.
- 1.5 Based on the list of installations provided by the bidder, IISER, TIRUPATI will have its option to obtain details of the installations, their performance, after sales services etc. for evaluation of the tender, directly from the concerned organizations
- 1.6 Firms which have already supplied to IISER, TIRUPATI 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.
- 1.7 Conditional Offers will not be considered.
- 1.8 IISER, TIRUPATI will not provide any accommodation/transportation for the engineers/ representatives for attending installation. It is the absolute responsibility of the supplier to make their own arrangements.
- 1.9 The authorized person who signs the tender is required to indicate his email ID, mobile No. and also general e-mail ID for easy and faster communication.



Amendment of Bidding Documents

At any time prior to the deadline for submission of bids, IISER, TIRUPATI 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.

PREPARATION OF BIDS

3. **Period of validity of bids**

- 3.1. Bids shall be valid for a period of **90 days** from the date of opening the bid.
- 3.2. IISER, TIRUPATI may ask for the bidder's consent to extend the period of validity. Such request and the response shall be made in writing only. A bidder agreeing to the request for extension will not be permitted to modify his bid.

AWARD OF CONTRACT

4. Award Criteria

- 4.1 IISER, TIRUPATI shall award the contract to the technically eligible lowest bidder.
- 4.2 If more than one bidder happens to quote the same lowest price, IISER, TIRUPATI reserves the right to award the contract to more than one bidder or any bidder.

5. **Purchaser's Right to vary Quantities at the time of Award**

IISER, TIRUPATI 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.

6. **Corrupt or Fraudulent Practices**

IISER, TIRUPATI requires that the bidders who wish to bid for this project have highest standards of ethics.

- 6.1. IISER, TIRUPATI 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.
- 6.2. IISER, TIRUPATI 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



7. 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, IISER, TIRUPATI's interpretation of the clauses shall be final and binding on all partie**



CHAPTER - 3 : CONDITIONS OF CONTRACT

1. **Price**

- 1.1. The price quoted shall be considered firm and no price escalation will be permitted.
- 1.2. The price criteria should be on F.O.R., IISER TIRUPATI. Govt. Levies like GST. If any, shall be paid at actual rates applicable on the date of delivery. Rates should be quoted accordingly giving the basic price, GST, if any.
- 1.3. The rate of GST applicable to IISER Tirupati is 5% for the items procured for Research purpose as per Notification No. 45/2017-Central Tax (Rate) New Delhi, 14th November, 2017 and Notification No. 47/2017-Integrated Tax (Rate) New Delhi, 14th November, 2017

2. Services

2.1. Details of services rendered as well as after-sales services offered by you are to be made clear in the tender.

3. **Delivery Schedule**

- 3.1. The bidders may please note that the delivery of the system should be strictly **within 30 days from the date of placement of firm order.**
- 3.2. Goods should not be dispatched until the Vendor receives a firm order.

4. Warranty / Support

- 4.1. The items covered by the schedule of requirement shall carry Minimum **Three years of comprehensive warranty** from the date of acceptance of the equipment by IISER, TIRUPATI. Warranty shall include free maintenance of the whole equipment supplied including free replacement of parts. The defects, if any, shall be attended to on immediate basis but in no case any defect should prolong for more than 7 working days. The comprehensive warranty includes onsite warranty with parts.
- 4.2. The defects, if any, during the guarantee/warranty period are to be rectified free of charge by arranging free replacement wherever necessary. This includes cost, insurance, freight, octroi, local taxes if any should be borne by the beneficiary. A clear confirmation should be given for this item.
- 4.3. The warranty on the associated software should cover providing of upgraded version/s, if any, released during the warranty period free of cost.



4.4. The vendor will have to arrange for all the testing equipment & tools required for installation, testing & maintenance etc.

5. Indemnity

The vendor shall indemnify, protect and save IISER, TIRUPATI 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 equipment supplied by him.

6. Freight & Insurance

The equipment's 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 IISER, TIRUPATI site.

7. Payment

7.1. No advance payments are allowed under any circumstances.

7.2. Payment will be made directly to the suppliers by wire transfer for 100% of the Invoice value after receipt of the goods in our Stores, tested /inspected and found satisfactory with regard to quality, quantity, and specifications ordered for and after satisfying that the terms and conditions of supply have been fulfilled.

7.3. By Irrevocable Letter of Credit for 100% of the Invoice value. However, 90% of the Invoice value will be paid on presentation of original shipping documents to our bankers and balance 10% will be paid after receipt of material and acceptance of the goods at IISER Tirupati.

8. Penalty for delayed Services / LD

- 8.1. As time is the essence of the contract, Delivery period mentioned in the Purchase Order should be strictly adhered to. Otherwise the IISER will forfeit EMD/SD and also LD clause will be applicable /enforced.
- 8.2. If the supplier fails to Supply, Install as per specifications mentioned in the order within the due date, the Supplier is liable to pay liquidated damages of 1% of order value per every week of delay subject to a maximum of 10% beyond the due date. Such money will be deducted from any amount due or which may become due to the supplier.
- 8.3. IISER, TIRUPATI reserves the right to cancel the order in case the delay is more than 10 weeks. Penalties, if any, will be deducted from the Security Deposit.



Jurisdiction

The disputes, legal matters, court matters, if any, shall be subject to Tirupati Jurisdiction only.

10 Comparisons of Bids

The Purchaser shall compare all substantially responsive bids to determine the lowest valuated bid.

This Institute is following and abide with the Public Procurement (Preference to Make in India), Order 2017, DIPP, MoCI Order No. P-45021/2/2017-B.E.II dated 15th June 2017 and subsequent amendments to the order. Accordingly preference will be given to the Make in India products while evaluating the bids, however, it is the sole responsibility of the bidder(s) to specify the product quoted by them is of Make in India product along with respective documentary evidence as stipulated in the aforesaid order in the technical bid itself.

11. Force Majeure

IISER, TIRUPATI may consider relaxing the penalty and delivery requirements, as specified in this document, if and to the extent that the delay, in performance or other failure to perform its obligations under the Contract, is the result of a Force Majeure.

Force Majeure is defined as an event of effect that cannot reasonably be anticipated such as acts of God (like earthquakes, floods, storms etc.) acts of states, the direct and indirect consequences of wars (declared or undeclared) hostilities, national emergencies, civil commotion and strikes at successful Bidder's premises.

12. Arbitration

All disputes of any kind arising out of supply, commissioning, acceptance, warranty maintenance etc. shall be referred by either party (IISER, TIRUPATI or the bidder) after issuance of 30 days notice in writing to the other party clearly mentioning the nature of dispute to a single arbitrator acceptable to both the parties. The venue for arbitration shall be IISER, TIRUPATI India. The jurisdiction of the courts shall be Tirupati, Andhra Pradesh, India.

Assistant Registrar (Admin & Purchase)



<u>CHAPTER 4</u>

SCHEDULE OF REQUIREMENTS, SPECIFICATIONS & ALLIED TECHNICAL GAS CHROMATOGRAPHY SPECIFICATIONS

Latest model microprocessor based GC system (TCD & FID detector to analysis both liquid and gases samples) for (safety) operation on 220V / 50Hz

- I. Column Oven:
- Should be capable of isothermal and temperature programming.

> Oven temperature controllable from 10 °C above ambient to 400 °C with set point resolution of 1 °C.

- Number of oven ramps: 10. More ramps will be preferred
- ➢ Oven Ramp Rate: 250⁰C/Min
- > Operating conditions may be controlled from either the built-in keyboard or via an external computer based control system
- Retention Time Repeatability < 0.06% or < 0.006min.

II. Electronic Pneumatic Control EPC/AFC/PPC

- Digital setting and control of carrier gas flow up to 100 ml/min.
- Pressure or flow ramps: 07

III. Sample Injection System – 2 nos:

1. Split/splitless capillary column injection unit which is electronically controlled via Electronic Pneumatic Controller (EPC/AFC/PPC)

- Temperature range should be up to 400 °C
- Pressure Range: 0 to 680 kPa. Higher range will be preferred.
- Number of pressure or flow ramps: 07
- Split ratio range: Better than 250:1. Higher range will be preferred.
- Maximum flow Rate: 0 400ml/min.
- > Inlet sealing system should be built in standard.

2. Packed Injector Port with EPC/AFC/PPC

IV. Flame Ionization Detector (FID) – 1 no:

- Full Electronic Pneumatic Control for the Detector.
- Temperature range: Up to 400 °C.
- Linear Dynamic range: > 10⁷
- Minimum Detection Limit: < 3 pgC/s (Dodecane)</p>
- Flameout detection & automatic reigniting of FID should be possible.

V. Thermal Conductivity Detector System – 1 no:

- Temperature range up to 400 °C
- TCD dynamic range of 10⁵ with sensitivity of 40,000 mV mL/mg

Gas analysis system - GC should be directly connected to reaction medium (On-line option) and TCD.



VI. Auto Sampler (software controlled):

Auto Liquid Sampler with Minimum 12 vials Sample Capacity. Additional: 100 Screw Cap Sample Vials with Septa.

VII. Control Software (32 bit):

The GC should be supplied with complete software for data acquisition & control through PC. The control software should be latest in all aspects & compatible with Windows-7/XPIt should boost productivity & designed to match advance features of latest GC systems. Should have sequence based data storage & retrieve functions. It should provide extensive capabilities for analysis of large amounts of high-precision data with a navigation toolbar for easy access to chromatographic data. It should have consistent & secure storage of data, methods & sequences. The control software should have very good data review & reprocessing capabilities using navigation tables.

*Note: Provision for both the FID and TCD detectors should run parallelly.

VII. Full installation kit with sufficient consumables including:

- > HP-5 and HP-10 capillary columns (30m X 0.25 X 0.25) or equivalent (each 1 no).
- > DB-1 capillary column or equivalent.
- Capillary column 30m x 0.53 mm x 0.25 μm (megapore capillary column; 50 meter).

> Porapak Q, R, T packed columns for Gas analysis H_2 , CO, O_2 , ethylene, Permanent Gases, CH_4 and $C_2H_{6.}$

Column ceramic cutter should be quoted.

> It should include all the gas tubing and connections with installation of required gas lines at the installation site. Also, should provide required number of regulators for various gases used for the GC system and FID/TCD.

- Suitable gas cylinders for GC along with gas purification panel should be quoted.
- Gas Cylinders:
 - > 47WC UHP gases with outlet valve specifications.
 - Pig tail or hose with bull head connection with 2-meter length should be included.
 - ➢ 500 mL capacity Canisters for Air, Nitrogen, CO₂, CO gases with calibration certificate should be included.
- > Online option:
 - Copper tube lining with safety detector with control (preferably Honeywell detector) and carbon monoxide detector should be included.
 - ➤ Gas samplers end to end leak proof connection should be included.
- Wheatstone bridge circuit for TCD detector should be included.

> 14 port value: For refinery gas analysis and the heating temperature should be greater than 80-100 deg C.

Bubble meter to measure the flow rate of the carrier gas should be included.



- Mass flow controller (2 nos) should also be included.
- Carbon monoxide sensor should be included.

 \succ Computer & Laser printer should be provided with the system and 1 0 KVA UPS system.

- > Other tools necessary for regular maintenance.
- > Teddler Bag for collecting gas samples should be provided (10 nos) as accessories.

Spares/Consumables: All essential spares and consumables for five years smooth operation must be quoted which includes sufficient quantities.

- Gas tight Syringes 5 mL for gas injection.
- GC ALS vials and caps & Septa 200 Nos.
- Additional GC auto-injector syringe 10uL 6 Nos.
- > Three years Warranty/ Free-reinstallation should be provided within 5 years.



<u>CHAPTER-5 PRICE SCHEDULE</u> <u>ALL THE BIDDERS SHOULD QUOTE THEIR OFFER IN FOLLOWING FORMAT FOR UNIFORMITY</u>

PRICE SCHEDULE FOR GOODS BEING OFFERED FROM ABROAD

Name of the Bidder _____

Tender No._____

1	2	3	4	5	6		7		8		9
SI N O	Item Description	Countr y of origin	Qt y	Units	Unit Price Total price (4x6)		Charges for Insurance & transportatio n to port/ place of destination		Total Price (7+8)		
					Ex-Works (named port of shipment)	FCA/FOB (named place of delivery)	Ex-Works (named port of shipment)	FCA/FOB (named place of delivery)	Ocean	Air	CIF/ CIP
1	Gas Chromatography		01	No.							

Total Bid Price in ______ in words.

Signature of Bidder:

Name :

Business Address



Note:

The Bidder may add rows as per requirement to include the prices of all Components/Parts, Warranties, Installation etc. whichever applicable.

- (a) Indian agents name & address _____
- (b) Installation, commissioning & training charges, if any_____
- (c) Cost of Spares _____
- (d) The Indian agent's commission shall paid in Indian Rupees only based on the Exchange Rate prevailing on the date of negotiation of documents.
- (e) The cost of optional items shall be indicated separately.



PRICE SCHEDULE FOR GOODS BEING OFFERED FROM INDIA

Name of the Bidder _____

Tender No._____

1	2	3	4	5	6	7	8	9	10	11	12
Sl.	Item	Со	Qty	Unit	Ex-Works.	Total price	GST	Packing &	Charges	Installa	Gross
No	Description	un tr y of Or igi n			Ex- Warehouse , Ex-show room off the shelf price (inclusive of tax	Ex-Works. Ex- Warehouse, Ex-show room off the shelf price (inclusive of tax already paid) 4x6	payable, if contract is awarded	forwarding up to station of dispatch, if any	of inland transpo rtation, insuran ce up to Institute	tion, Commi ssionin g & trainin g charges , If any.	Total (FOR)
					already paid)						
1	Gas Chromatogra phy		01	No.							
L	Total Bid Price in words.										

Signature of Bidder:

:

Name

Note:

The cost of optional items shall be indicated separately.

The bidder may add rows to include the prices of all components & warranties, installation etc. whichever applicable.

(a)Cost of spares ______ (b)Warranty if being charged include in BoQ



<u> CHAPTER – 6 : Checklist: Eligibility Criteria for Bidders</u>

Bidders to indicate whether the following are enclosed by striking out the non-relevant option.

(a)	Self-Attested copy of GST number as applicable	(Yes / No)
(b)	Agreements / Purchase orders / Completion certificates, if any, from the clients for whom similar supply has been made by the bidder in last three years	(Yes / No)
(c)	Compliance sheet with any deviation w.r.t. the terms	(Yes / No)
(d)	LD clause agreeable.	(Yes / No)
(e)	Acceptance of warranty period and Free replacements during warranty period	(Yes / No)
(f)	Deviation Sheet to be Attached	(Yes / No)



IMPORTANT NOTICE

TENDERERS RESPONDING TO THIS ENQUIRY SHALL BE DEEMED TO BE AGREEABLE TO THE TERMS AND CONDITIONS HEREIN CONTAINED. THESE TERMS AND CONDITIONS SHALL BE BINDING ON THE SUCCESSFUL TENDERER.CONDITIONAL TENDERS ARE LIABLE TO BE REJECTED. IISER TIRUPATI WILL PROCESS THE TENDER AS PER IISER TIRUPATI STANDARD PROCEDURES. THE DIRECTOR OF THE INSTITUTE RESERVES THE RIGHT TO REJECT ANY OR ALL OR PART OF TENDER WITHOUT ASSIGNING ANY REASON AND SHALL ALSO NOT BE BOUND TO ACCEPT THE LOWEST TENDER. IISER TIRUPATI WOULD NOT BE UNDER ANY OBLIGATION TO GIVE ANY CLARIFICATIONS TO THE AGENCIES WHOSE BIDS ARE REJECTED.

I agree to all terms and conditions mentioned in the tender document of the Institute

Signature of the Tenderer

