



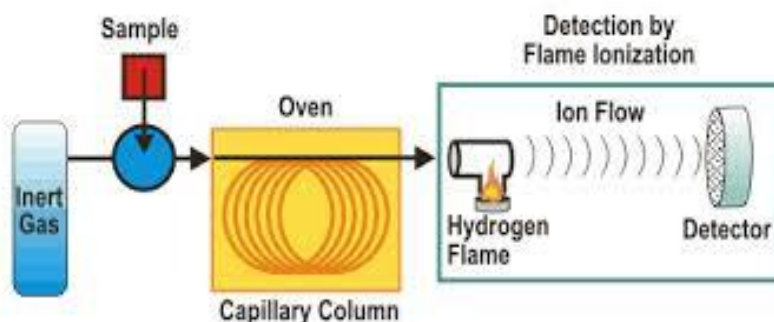
Tender No.  
GERMI/EEERWW/2014/005

GUJARAT ENERGY RESEARCH & MANAGEMENT  
INSTITUTE (GERMI)

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**GUJARAT ENERGY RESEARCH AND MANAGEMENT INSTITUTE  
INVITES QUOTATIONS FROM BIDDERS FOR PURCHASE OF  
GAS CHROMATOGRAPH FOR ITS ENVIRONMENT AND ENERGY  
EFFICIENCY RESEARCH WING**



Last date for submission of  
quotations: 20<sup>th</sup> November, 2014

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## 1. INVITATION FOR BIDS

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**INVITATION TO BIDDERS**  
**GUJARAT ENERGY RESEARCH & MANAGEMENT INSTITUTE**  
1st Floor, Energy Building, Pandit Deendayal Petroleum University Campus,  
Raisan Village, Gandhinagar, Gujarat – 382007, India  
Phone No.: +91-79-23275364 Fax No.: +91-79-23275380

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### **REQUEST FOR BIDS**

**Gentlemen:**

Sealed bids (technical and financial separate) are invited on behalf of Gujarat Energy Research and Management Institute (GERMI) for procurement of Gas Chromatograph for the Environment Research Lab of GERMI.

Bidders are requested to kindly bid for the same based on the specifications and terms and conditions given in the tender document. Please read the tender document carefully and bid only if all the terms especially related to payment are acceptable.

Bids should be submitted to **The Director, GERMI** on or before 20<sup>th</sup> November, 2014. Director, GERMI reserves the right to accept or reject all the bids without giving any reason thereof.

----- Sd -----  
**Madhu Choudhary**  
Dy. Manager (Commercial)

## 2. INTRODUCTION

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### 2.1 Overview of GERMI

- 2.1.1 Gujarat Energy Research & Management Institute (hereinafter referred to as “GERMI”, is promoted by Gujarat State Petroleum Corporation Ltd. (GSPC) which is a fully integrated energy company. It is one of the fastest growing state owned companies and has excellent support from Government of Gujarat.
- 2.1.2 GERMI is a centre of excellence in industry learning and has been set up to develop human resource assets to cater to the petroleum and allied energy sectors, improve knowledge base of policy makers and technologists and provide a competitive edge to leaders to compete in the global arena. GERMI has already established Pandit Deendayal Petroleum University which is actively pursuing initiatives in the areas of education and research in alternative energy resources.
- 2.1.3 GERMI plans to develop a World-Class Research Centre with all the high-tech state-of-the art facilities. The research centre is currently at a very nascent stage and needs a long way to go. To begin this journey, it had already started developing the initial infrastructure for setting up of Environment Lab.
- 2.1.4 Quotes are invited for procurement of “**Gas Chromatograph**” for the above mentioned laboratory as per the minimum desired specification given in this document.

### 2.2 Environment and Energy Efficiency Research Wing

- 2.2.1 The Environment and Energy Efficiency Research wing of GERMI works on issues of National and International importance related to the science, technology and management aspects related to Environmental pollution and Energy efficiency, Renewable Energy and Optimization of conversions of Waste to Energy.
- 2.2.2 This Research Wing primarily focuses on areas or services needed to help solve practical problems faced by industries & to enable the integration of innovative need-based technologies and other holistic interventions.
- 2.2.3 The research work carried out under this wing is in response to emerging environmental challenges faced by Gujarat and the country at large, aligned with India’s priorities, commitments and stand with respect to multilateral environmental agreements.

### 3. ELIGIBILITY OF BIDDERS

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#### 3.1 Eligible Bidders

3.1.1 The Bidder should be an original instrument manufacturer

OR

The Bidder should be a selling agent/authorized distributor/authorized dealer/authorized supply house.

3.1.2 The Bidder should submit back-up authority letter from the concerned manufacturers who authorized it to market their product, provided further such an authority letter is valid atleast till the 60 days from the date of submitting the Bids.

3.1.3 Offers without back-up authority from the manufacturers will not be considered.

#### 3.2 Experience

3.2.1 The Bidder should have minimum 5 years of experience in manufacturing / supplying the required instrument in India or worldwide.

3.2.2 The Bidder should have supplied minimum **5 no.s** of instruments during **last 5 years** to leading national or international **research institutes or laboratories** with documentary evidence in the form of copy of purchase orders, Installation reports etc.

3.2.3 The Bidder should also mention the pre-requisites for **installation and operational necessities** in its quotes, for which separate order shall be placed, if required.

3.2.4 The quotations submitted by any Bidder failing to meet all the requirements in clauses 3.1 and 3.2 above can be rejected by GERMI at its own discretion.

## 4. PREPARATION AND SUBMISSION OF BIDS

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### 4.1 Preparation of bids

- 4.1.1 The bid should be in two different parts i.e. technical and financial.
- 4.1.2 The technical bid should comprise of the details regarding the specifications of the instrument, its brochures, other documents required such as manufacturer's authority letter, copy of previous purchase orders etc.
- 4.1.3 The financial bid should consist of the quotation of the instrument.
- 4.1.4 Both the technical and financial bids should be submitted separately in two different envelopes, mentioning on top of each – Technical Bid / Financial Bid.
- 4.1.5 Both the envelopes, should be properly sealed and put in a separate bigger envelop together and that sealed envelope should be submitted to GERMI, clearly mentioning on the top of it "Bids for supply of Gas Chromatograph for Environment Lab of GERMI" and the tender no. GERMI/EEERW/2014/005 should also be mentioned.

### 4.2 Security Deposit

- 4.2.1 The Bidder shall furnish, as part of its Bid, a Security Deposit in the form of a Demand Draft in the favor of Gujarat Energy Research and Management Institute, payable at Gandhinagar, Gujarat. The Bid Security amount shall be Rs. 15,000 (Rupees Fifteen Thousand only) and shall be submitted along with Technical Bid.
- 4.2.2 GERMI shall not be liable to pay any interest on the Security deposit so made and the same shall be interest free.
- 4.2.3 A Bid submitted without the Security deposit shall not be considered and summarily rejected.
- 4.2.4 The Demand Draft by the Bidder shall be given from Nationalized/Scheduled bank only.
- 4.2.5 The Security deposit shall specifically bind the Bidder to keep its offer valid for acceptance and to abide by all the conditions of the tender document in the event of the GERMI desiring to award the work to the said bidder.
- 4.2.6 GERMI shall have an unqualified discretion to invoke the Demand Draft and claim the amount there under in the event: (i) bidder fails to keep the Bid valid up to the date specified; or (ii) refuses to unconditionally accept purchase order and carry it out in accordance with the bid in the event such bidder is chosen as the successful bidder.
- 4.2.7 GERMI shall, however, arrange to release the Security deposit in respect of unsuccessful bidders, without any interest, as soon as possible after a decision is taken about the award of the tender.
- 4.2.8 The Security deposit in respect of the successful bidder shall be released once the bidder accepts he purchase order unconditionally.
- 4.2.9 The Security deposit shall be forfeited and appropriated by GERMI as mutually agreed genuine pre-estimated compensation and damages payable to the GERMI for, inter alia, time, cost and effort of GERMI without prejudice to any other right or remedy that may be available to GERMI hereunder or otherwise, under the following conditions:
  - (i) if a bidder submits a non-responsive bid;

- (ii) if a bidder engages in a corrupt practice, fraudulent practice, coercive practice, or restrictive practice;
- (iii) if a bidder withdraws its bid during the period of bid validity as specified in this tender; or
- (iv) in the case of successful bidder, if it fails within the specified time limit to accept the purchase order;

#### **4.3 Submission of bids**

4.3.1 Last date for submission of bids is 20<sup>th</sup> November, 2014 by 1500 hrs. Director, GERMI reserves the right to reject any/all offers without assigning any reasons thereof.

4.3.2 Bids should be submitted to:

**The Director**

**Gujarat Energy Research and Management Institute,**

1<sup>st</sup> Floor, Energy Building, Pandit Deendayal Petroleum University Campus,  
Raisan Village, Gandhinagar, Gujarat – 382007, India

Any queries related to the tender may be addressed to the following person:

**Ms. Madhu Choudhary,**

Dy. Manager (Commercial)

Email: [madhu.c@germi.org](mailto:madhu.c@germi.org)

Ph.: +90 79 23275364

## 5. GENERAL TERMS AND CONDITIONS

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### 5.1 General Instructions:

- 5.1.1 Completeness of the instrument shall be the responsibility of the Bidder. Any instrument, fittings and accessories, which may not be specifically mentioned in the specification or drawing(s) but which are usual or necessary for the satisfactory functioning of the instruments (successful operation and functioning of the instrument being Bidder's responsibility), shall be provided by the Bidder without any extra cost.
- 5.1.2 The instrument shall be manufactured in accordance with sound engineering and good industry standards and also the Bidder shall in all respect design, engineer, manufacture and supply the same within delivery period to the entire satisfaction of GERMI.
- 5.1.3 The supply shall be carried out strictly in accordance with the specifications or as directed by GERMI.
- 5.1.4 The Bid should be valid for **at least 120 days**.
- 5.1.5 Income tax and other statutory dues shall be deducted from the Bidder's bill as per Govt. of India rules.
- 5.1.6 Time allowed for completion of work shall be strictly followed; otherwise the Bidder shall be liable to pay **compensation at the rate of 0.5 % of the purchase order value** of the job undone per week of delay on the part of the Bidder subject to a maximum of 5% of the total value.
- 5.1.7 All or any Claim(s), dispute(s) or difference(s) arising out of or in with connection with this work shall be subject to the jurisdiction of the Courts at Gujarat only.

### 5.2 Materials and Workmanship

- 5.2.1 The Bidder shall supply & deliver the instrument at the site. The Bidder shall arrange for **transportation, loading and unloading of materials at project site at his own cost & risk**.
- 5.2.2 The Bidder shall be responsible for securely protecting and packing the instrument as per prescribed standards in force to withstand the journey and ensuring safety of materials and also arrival of materials at destination in original condition and good for contemplated use.
- 5.2.3 In order to import any items, associated with the GERMI from abroad or from any other state in India, **Bidder shall have to arrange any clearance, permission, if required at his own risk, from any Government** (Government of Gujarat & Government of India) or any Government controlled organization, for transportation of materials from manufacturing shop to delivery at site. Necessary certificates if so required shall be issued by the GERMI within reasonable time after getting written request from the Bidder along with the necessary documents substantiating necessity of such approvals.

### 5.3 Warranty/Guarantee

- 5.3.1 The Bidder should transfer the original warranty received from the manufacturer to GERMI.
- 5.3.2 A warranty of minimum two years should be provided. Such warranty should also cover all accessory instruments that work in conjunction with the main instrument and should be clearly specified.



5.3.3 The Bidder must ensure that the goods supplied are new, unused and of most recent or current models and incorporate all recent improvements in design and materials unless provided otherwise.

#### **5.4 Time Schedule of Work in detail**

5.4.1 The time allowed for completion of work shall be **60 (Sixty) days or less**, which shall be reckoned from the date of issue of Purchase Order/ Letter of Credit, whichever is later.

5.4.2 Strict adherence and guaranteed delivery schedule shall be the essence.

#### **5.5 Terms of Payment**

5.5.1 The normal terms of payment are 100% of the payable amount shall be paid within 30 days time after receipt of invoice and acceptance of the materials in good condition and its satisfactory installation and operation or 80% against receiving shipment documents and 20% against installation, in case order is placed to foreign supplier.

5.5.2 Subject to any deduction which GERMI may be authorized to make, the Bidder shall be entitled to payment as follows:

a) All payments shall be made in Indian Rupees or the currency in which the bid has been received.

b) The Bidder shall submit the bill / invoice showing separately VAT, Service Taxes and any other statutory levies in the bill / invoice.

5.5.3 Purchases should normally be made on firm prices. However, statutory variation on account of change in customs duty, excise duty, could be allowed to Bidders if so agreed and mentioned in the Purchase Order.

5.5.4 The Bid should specify separately the F.O.B. price, C.I.F., CIP price and the customs duty payable. They will also indicate correctly the rate of customs duty applicable along with Indian customs tariff number. In case of Indian Bidder, total deliverable cost including breakup of the applicable taxes, levies etc. shall be provided as part of the Bid.

5.5.5 In case where all the Bidders have quoted only for imported instrument against forwarded delivery, the quotes will be evaluated on prices exclusive of customs duty. In such case the amount of customs duty as legally liable calculated by reference to the tariff value of the instrument declared by the Bidder.

#### **5.6 Technical data**

5.6.1 Each Bidder must submit along with its Bid, the technical data for all items separately along with the installation and operational requirements.

#### **5.7 Operating instruction & maintenance manual**

5.7.1 The Bidder shall submit essentially the comprehensive operating instructions, maintenance schedule and log sheets for the instrument. This shall be supplementary to manufacturers operating and maintenance manuals.

5.7.2 On Site Training: The Bidder shall arrange the required training to get the instruments operated skillfully and safely.

## 5.8 Maintenance during warranty period

- 5.8.1 **Complaints:** The Bidder shall agree to receive calls for any and all problems experienced in the operation of the instrument, attend to those within 48 hours of receiving the complaints and shall take steps to immediately correct any deficiencies that may exist including replacement of compressor at no cost to owner.
- 5.8.2 **Repairs:** All instruments that require repairing shall be immediately serviced and repaired. Since the period of mechanical maintenance runs for TWO YEARS concurrently with the defects liability period, all replacement parts and labor during this period shall be supplied promptly *free of charge* to the owners.
- 5.8.3 **Warranty replacement:** Replacement of parts, if required, during the warranty period shall be supplied *free of cost* by the Bidder. All charges shall be paid by the Bidder for release of spare parts from the customs. Kindly note that only custom papers & DSIR Certificate shall be supplied by GERMI.

## 5.9 Insurance coverage

- 5.9.1 The instrument ordered shall be insured by the Bidder for the onward journey from the factory up to the GERMI premises until they are installed, commissioned and handed over to GERMI representative. Any loss on account of any incident before installation, commissioning and handing over shall be full responsibility of the Bidder.

## 5.10 Other general terms

- 5.10.1 The manufacturer or and its authorized agents/ dealers representatives are requested to quote for all possible variants and models along with optional components and attachments. The sample preparation components as required for a specific model should also be quoted.
- 5.10.2 The manufacturer/Bidder (or the Indian Agents) of the instrument shall erect & commission them in our laboratory and demonstrate the performance of the instrument as per their claims.
- 5.10.3 The instrument must be capable of operating on the standard AC supply in India i.e. - 220 V  $\pm$  10%. The UPS or any other special requirements of the supply must be mentioned in the bid and requisite instrument should also be supplied by the manufacturer.
- 5.10.4 The complete instrument & all accessories shall be guaranteed for satisfactory performance.
- 5.10.5 The Bidder shall provide at least one hard copy of operation and maintenance manuals along with complete circuit diagram of the main instrument and all its accessories.
- 5.10.6 If GERMI desires, the Bidder directly or through its representatives should be ready to take up the AMC of the instrument post the warranty period.
- 5.10.7 The manufacturer or and its authorized agents/ dealers representatives may have to provide an onsite training of the operation of the said instrument to the suitably assigned person/persons by the competent authority of GERMI.

- 5.10.8 Specific requirements of samples, space and working environment desired for the best/optimum performance of the instrument should be mentioned. The installation space, temperature and other working conditions should also be mentioned.
- 5.10.9 The place of delivery for all instruments is GERMI Gandhinagar.
- 5.10.10 Software or any IT requirements viz. computer, printer, monitor and allied accessories should also be quoted with assured supply.
- 5.10.11 All the instruments should be quoted with price distribution for all essential and optional attachments, spare parts, maintenance kit (tool set), operational consumables, standards whichever is applicable.
- 5.10.12 Essential instrument spares for 5 years should be quoted as an option for all instruments and instrument downtime should not exceed 24 working days with component breakdown. Supporting documents to this effect should be attached.
- 5.10.13 Computer units supplied with each instrument should come with valid operating system CD, complete office suite programmes, and Antivirus Software valid for three years subscription for virus update.

## 6. TECHNICAL SPECIFICATIONS

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### 6.1 Minimum Desired Specifications

6.1.1 Given below are the minimum desired specifications for the instrument. Bidder's instrument should at least fulfill these specifications. Anything above these specifications is invited.

#### 1. General Capabilities

- Capillary Flow Technology (CFT)
- Ultra fast GC analysis using Low Thermal Mass Technology (LTM) with analysis time 2 - 5 min
- Adjustable pressure set points with increments of 0.001psi
- Compatible with MS or Third Detector in further expansion

#### 2. Injection system

- Separate Split / splitless column injection units for different columns via controllable with Electronic Pneumatic Controller (EPC)
- Temperature range - up to 400 °C
- Pressure Range - 0 to 680 kPa (100 psi) with  $\pm 0.001$ psi accuracy
- Temperature programming steps – 20 / more
- Pressure or flow ramps - 3 / more
- Split ratio range - 0 to 7500 / more
- Turn top inlet sealing system

#### 3. Oven

- Temperature controllable from 4°C above ambient to 450°C with set point resolution of 1 °C. Cool down time from 450 °C to 50 °C as 4 minute minimum / standard
- Ambient rejection of < 0.01°C/°C
- Oven ramps: up to 20 maximum
- Operating system either with the built-in keyboard or via an external computer based control system

#### 4. Columns

- Packed column
- Capillary column
- Additional columns for hydrocarbon gas analysis, if any

#### 5. Detectors

- I. Flame Ionization Detector (FID)
  - Minimum Detection Limit: < 1.4 pgC/s (Tridecane)
  - Data acquisition rate for FID upto 500Hz
- II. Thermal Conductivity Detector (TCD)
  - Minimum detectable level: 400 pg tridecane/mL with He carrier.
  - Linear dynamic range: > 105  $\pm$  5%
  - Maximum temperature: 400 °C
  - Standard EPC for 2 gases (He, H<sub>2</sub>, or N<sub>2</sub> matched to carrier gas type)

## 6. IT requirement

- Compatible software
- Latest configuration branded Desktop PC with at least 17" LCD Monitor with LaserJet Printer

## 7. Others

All essential / optional accessories required for GC operation

## 8. Installation

PRW seeks complete installation including required gases, tubing, designated regulators with all essential tools meant for calibration and maintenance of the equipment

## 9. Auxiliary requirements

- Hydrocarbon gas mixtures (**All cylinders require regulators**)

Sl. No.	Capacity	Methane (ppm)	Ethane (ppm)	Propane (ppm)	i-butane (ppm)	n-butane (ppm)	i-pentane (ppm)	n-pentane (ppm)
Cylinder-1	10 L / 1.3 m <sup>3</sup>	50	50	50	50	50	50	50
Cylinder-2	10 L / 1.3 m <sup>3</sup>	250	250	250	250	250	250	250
Cylinder-3	10 L / 1.3 m <sup>3</sup>	500	500	500	500	500	500	500
Cylinder-4	10 L / 1.3 m <sup>3</sup>	750	750	750	750	750	750	750
Cylinder-5	10 L / 1.3 m <sup>3</sup>	1000	1000	1000	1000	1000	1000	1000

- Propane cylinder with 99.99 % purity; 7CFM capacity with regulator
- Methane cylinder with 99.99 % purity; 7CFM capacity with regulator
- High Vacuum Pump (up to 100 litres / minute displacement)
- Rotary Vacuum Pump (up to 200 rpm with upto 1000cc capacity)

## 7. PRICE FORMAT

7.1 The Bidder shall have to provide a Price quotation as per the format given below:

(For Indian Bidders)

Bidder's Name: \_\_\_\_\_  
 Quotation no: \_\_\_\_\_ Validity of Quotation: \_\_\_\_\_  
 Gross weight of the consignment (In KG): \_\_\_\_\_  
 Dimension (L X B X H) of each package and number of packages: \_\_\_\_\_

Sr. No.	Item Description	Qty	Unit price (In Rs.)	Total price (Unit price x Qty)
1.				
2.	<b>TOTAL PRICE OF INSTRUMENT</b>			
3.	Duties, taxes (please elaborate on applicable taxes and duties including excise separately here), transportation cost insurance etc. a. b. c. d.			
4.	<b>TOTAL LANDED PRICE AT GERMI OFFICE (PLEASE REFER NOTES BELOW)</b>			

**Notes:**

1. Indian Bidder must furnish prices of each items and components separately.
2. Total Landed Price should be inclusive of all direct and indirect costs till installation at GERMI premise including duties, levies, insurance, freight, installation & commissioning charges, TPI charges from any of the agencies, costs of training GERMI's Representatives. GERMI shall not make any payment over and above Total Landed Price.
3. It is also mandatory to enlist all taxes and duties as applicable on date of submission of the quotation.
4. Sales tax should be quoted without Form C. GERMI will not issue Form 'C' to the Indian Bidder.
5. Bidder will submit the AMC charges as applicable. Charges must be quoted on year wise basis.

**(For Foreign Bidders)**

Bidder's Name: \_\_\_\_\_  
 Country of Origin: \_\_\_\_\_ Airport of Export: \_\_\_\_\_  
 Quotation no: \_\_\_\_\_ Validity of quotation: \_\_\_\_\_  
 Gross weight of the consignment (In KG): \_\_\_\_\_  
 Dimension (L X B X H) of each package and number of packages: \_\_\_\_\_

Sr. No.	Item Description	Qty	Unit price (Currency)	Total price (Unit price x Qty)
1.				
2.	<b>GROSS TOTAL PRICE OF ALL THE INSTRUMENTS</b>			
3.	Air Freight (upto Mumbai/Ahmedabad Airport)			
4.	Insurance charges			
5.	Any other charges, if any			
6.	<b>TOTAL LANDED PRICE AT GERMI OFFICE</b>			
7.	<b>Installation and Commissioning Charges</b>			
8.	<b>Charges for training GERMI employees, if any</b>			

**Note:**

1. Bidder must indicate the currency in which prices are quoted.
2. Foreign Bidder must indicate the gross weight of the consignment along with the number and dimensions of the package(s).
3. Total Landed Price quoted should be inclusive of all direct and indirect costs till installation at GERMI premise including duties, levies, insurance, freight, installation & commissioning charges, TPI charges from any of the agencies, costs of training GERMI's Representatives etc. GERMI shall not make any payment over and above Total Landed Price.
4. It is also mandatory to enlist all taxes and duties as applicable on date of submission of the quotation.
5. Bidder will submit the AMC charges as applicable. Charges must be quoted on year wise basis.