



सीएसआईआर- केन्द्रीय खाद्य प्रौद्योगिकी अनुसंधान संस्थान  
मैसूर-570020, भारत  
CSIR- CENTRAL FOOD TECHNOLOGICAL RESEARCH INSTITUTE  
MYSORE-570 020, INDIA  
(Constituent Laboratory of CSIR, New Delhi (DSIR, Ministry of Science & Technology, GoI)  
An ISO 9001:2008, ISO 14001:2004 & ISO 17025:2005, NABL Accredited Laboratory

## बोली लगाने के लिए आमंत्रण/INVITATION TO BID

सं./No. File No. CFTRI/52285/19

दिनांक/ Date: 10<sup>th</sup> फरवरी/ 10th Feb 2020

### **GAS CHROMATOGRAPHY WITH ACCESSORIES**

etender: For submitting tenders, login to <https://etenders.gov.in/eprocure/app>

अंतिम तिथी/LAST DATE:

- 1) TENDER SUBMISSION : AT 14.00 HRS (IST) ON 24-FEB-2020
- 2) TENDER OPENING(Technical Bids Only): AT 14.30 HRS(IST) ON 25-FEB-2020

**BOQ (Bill of Quantity)** - Bidders should submit their financial bid in the format provided and no other format is acceptable. BOQ has been given as a standard format along with the tender document. It is mandatory for all the bidders to upload duly filled BOQ (in MS Excel Format) towards submission of their Financial Bid. No changes or modification to the given format is acceptable. Bidders are required to go through the instructions carefully before filling BOQ.

Contact Details:  
Stores & Purchase Officer  
CSIR-CFTRI, Cheluvamba Vilas,  
K.R.S. ROAD, Yadavgi P.O.  
Mysuru -570020  
Tel: 0821-2515440/2515447  
Fax: 0821-2515440  
e-mail: [cosp@cftri.res.in](mailto:cosp@cftri.res.in)  
[sosp@cftri.res.in](mailto:sosp@cftri.res.in)

**INSTRUCTIONS TO BIDDERS**

1. The Instructions, Terms & Conditions, General Conditions of Contract (GCC), Special Conditions of Contract (SCC), Annexures and Formats hosted in our website [www.cftri.com](http://www.cftri.com) (Path : Home Page→ Tenders→Standard Tender Document [scrolling text] ) constitutes integral part of this tender.
2. **Warranty: One Year (1 Year)** from the date of Installation and Commissioning.
3. **Bid Security (EMD): Rs.80,000.00 (Rupees Eighty Thousand Only).**
4. **Performance Security: 10% of the Contract Value.**
5. Integrity Pact **is not applicable** for this tender.
6. Pre-Bid Conference **is not applicable** for this tender.
7. **Terms of Payment:** The method and conditions of payment to be made to the supplier under this Contract shall be as follows:

**A. Payment for Goods supplied from Abroad:**

Payment of foreign currency portion shall be made in ( ) [currency of the Contract Price] in the following manner:

(i) **On Shipment: 90 % (Ninety percent)** of the Contract Price of the Goods shipped shall be paid through Sight Draft/Irrevocable Letter of Credit opened in favor of the Supplier upon submission of documents specified in GCC/SCC.

**(ii) On Acceptance: 10 % (Ten percent)** of the Contract Price of Goods received shall be paid within thirty (30) days of receipt of the Goods and successful installation & commissioning upon submission of claim supported by the acceptance certificate issued by the Purchaser along with the Performance Security for 10% of the Contract Value.

The L/C will be confirmed at the suppliers cost, if requested specifically by the supplier. All bank charges abroad shall be to the account of the beneficiary i.e. supplier and all bank charges in India shall be to the account of the opener i.e. purchaser. If L/C is requested to be extended/reinstated for reasons not attributable to the purchaser, the charges thereof would be to the suppliers' account. Payment of local currency portion shall be made in Indian Rupees within thirty (30) days of presentation of claim supported by a certificate from the Purchaser declaring that the Goods have been delivered and that all other contracted Services have been performed. The LC for 100% value of the contract shall be established after deducting the agency commission payable if any, to the Indian agent.

**B. Payment for Goods and Services supplied from India:**

Payment for Goods and Services supplied from within India shall be made in Indian Rupees, [INR] as follows:

**On Delivery, Installation and Acceptance:** 100 % (Hundred Percent) of the Contract Price shall be paid on receipt of the Goods, upon submission of the documents specified in GCC/SCC and the acceptance certificate issued by the Purchaser.

### Technical Specification for Gas Chromatography with Accessories:

Gas Chromatograph with the following specification is required to carry out analysis of food samples of different categories for pesticide residues. The supplied equipment should meet all the IQ/OQ/PQ criteria required for NABL ISO 17025 certification purposes.

<b>Gas Chromatography (GC) Specification</b>		
<b>Sl. No.</b>	<b>Parameter</b>	<b>Description</b>
<b>1.</b>	<b>General required features:</b>	Dual column-dual injection ports with dual detectors (ECD and FID) with auto sampler
		All the variables like temperature, pressure, flow should be electronically controlled
		All the required licensed software versions (with data collection to run the equipment independently with a core i7 processor HP/DELL computer with latest operating software (version Windows 10 and above). Latest Software containing facility to calculate S/N for LOD & LOQ levels. (Software configuration should be compatible to the machine)
		Printer -HP LaserJet pro MFP M226dw.
		Graduated calibrated/validated Flowmeter with NIST traceability
<b>2.</b>	<b>Auto injector:</b>	Minimum of 100 vial capacity
<b>3.</b>	<b>Injectors:</b>	Dual injection ports with capillary split/split less injection modes, PTV
		Programmable temperature controller
		Gas saver mode
		Split/split less , Pulsed split/split less modes
		Programmable flow and pressure should be available
<b>4.</b>	<b>Oven:</b>	Temperature programmable from ambient + 4°C to 450 °C or more.
		Oven ramp: minimum 05 ramps
<b>5.</b>	<b>DETECTORS</b>	
	<b>Flame Ionization Detector:</b>	Minimum detection level (for dodecane or tridecane): < 1.5 pg C/s or 3pg C/s with Octane
		Flame out detection and automatic reigniting
		Linear dynamic range of >10 <sup>5</sup>
		Maximum operating temperature >450°C
	<b>Electron Capture Detector:</b>	<sup>63</sup> Ni electron source Sensitivity (detectable level) < 7fg of Lindane Maximum temperature: 400°C Linearity > 10 <sup>4</sup>
<b>6.</b>	<b>Warranty:</b>	1 year warranty + 2 years post warranty AMC to be quoted separately

- Quote should include capillary columns DB-1, DB-5 and wax columns or equivalent (**2 nos each**)
- All the required necessary Gas cylinders with 99.9995% purity (and dual stage steel regulators of make Matheson/Swagelok (**two for each type of gas**) should be provided
- Offer must include declaration of ten years use guarantee with full support including spares, consumables, accessories and upgradation of instrument and software.
- Installation and demonstrating the performance as claimed in the offer at the installation site.
- Onsite training must be provided at the installation site by application engineers after installation and performance demonstration (at least two visits).
- Supplier should make arrangements to collect and dispose the Ni63 electron source of ECD after the life of instrument as per safety regulations norms.
- All software upgrades to be provided free of cost for 10 years from the date of installation.

Apart from the spares supplied along with the instrument, following consumables have to be provided:

1. Leak detector and flow meter.
2. GC splitless injector liner - 04 nos each type
3. glass/quartz wool
4. O- ring for injector liner – 20 nos
5. Spilt vent trap or similar item - 1 no
6. Spare nuts for column connection - 4 pairs
7. Spare ferrules of different sizes for column connection – 10 pairs
8. Spare nuts for column connection - 4 no.'s at GC interface / transfer line
9. 1.5ml and 2.0ml Screw top vials with caps for auto sampler – 1000 nos. each
10. Syringes -2 nos
11. Screw caps with Septa – 1000 nos.
12. Good quality moisture, hydrocarbon and oxygen traps should be provided