

## DEPARTMENT OF CHEMICAL ENGINEERING INDIAN INSTITUTE OF TECHNOLOGY MADRAS CHENNAI – 600036, INDIA

Ref. No. RB/16-17/CHE/001/GAII/RVIN

Date: 21 Jul. 2016

**Due date: 11 Aug. 2016** 

#### Item name: Gas Chromatograph/Mass Spectrometer (GC/MS)

- 1. Quotations are invited in a **two bid system** for the items shown overleaf (in Annexure I). The offers / bids should be submitted as Technical bid and Financial bid. The Technical bid should consist of all technical details / specifications only. The Financial bid should indicate item-wise price for each item and it should contain all Commercial Terms and Conditions including Taxes, transportation, packing & forwarding, installation, guarantee, payment terms, pricing terms etc. The Technical bid and Financial bid should be put in separate covers and sealed. Both the sealed covers should be put in a bigger cover. The Tender for supply of "\_\_\_\_\_\_\_\_\_" should be written on the left side of the Outer bigger cover and sealed.
- 2. The quotations should be valid for sixty days from the due date and the period of delivery required should also be clearly indicated.
- 3. The total cost of the equipment in terms of CIP Chennai should be clearly mentioned.
- 4. Terms of warranty and guarantee should be explicitly mentioned.
- 5. Packing and delivery charges, customs and clearance duty should be clearly stated.
- 6. Goods shall not be supplied without an official supply order.
- 7. Local firms: Quotations should be for free delivery to this institute. If quotations for ex-godown delivery charges should be indicated separately.
- 8. Firms outside Chennai: Quotations should be for F.O.R. Chennai. If F.O.R. consignor station, freight charges by passenger train / lorry transport must be indicated. If ex-godown, packing, forwarding and freight charges must be indicated.
- 9. The rate of sales / general taxes and the percentage of such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for sales / general taxes will be admitted at any stage and on any ground whatsoever. The taxes leviable should take into consideration that we are entitled to have Concessional Sales Tax (CST) applicable to non-government educational institutions run with no profit motive for which a concession sales tax certificate will be issued at the time of final settlement of the bill.
- 10. Payment: Specify the mode of payment and if advanced payment has to be made. Every attempt will be made to make payment within 30 days from the date of receipt of bill / acceptance of goods, whichever is later.
- 11. IIT Madras is exempt from payment of excise duty and is eligible for concessional rate of customs duty. Necessary certificate will be issued on demand.
- 12. IIT Madras has the right to accept the whole or any part of the tender or portion of the quantity offered or reject it in full without assigning any reason.
- 13. The sealed quotation should be addressed and sent to

Dr. R. Vinu (Assistant Professor)
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Chennai – 600036, Ph. (O) +91-44-22574187



# DEPARTMENT OF CHEMICAL ENGINEERING INDIAN INSTITUTE OF TECHNOLOGY MADRAS CHENNAI – 600036, INDIA

#### **Annexure I**

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### **Technical specifications of Gas Chromatograph/Mass Spectrometer (GC/MS)**

Component	Requirement
Gas Chromatograph (GC)	Single Quadrupole (or) ion trap mass detector
/ Mass Spectrometer	Electron impact ionization module
(MS)	Mass range = 10-700 Da
(1.12)	Compatible with Frontier Single Shot Micropyrolyzer (PY-
	3030S, Frontier Laboratories, Japan).
	Two capillary split/splitless injection ports
	Electronic/pneumatic pressure control for gases
Column	One capillary low bleed column (Restek 5 MS or equivalent)
Accessories/Consumables	Standard accessories like syringes ( $10~\mu L$ , $5~\mu L$ ), column nuts, ferrules, low bleed column septa, SSL liner, filament and other items in the 1 year consumables kit Supply should include high purity He cylinder ( $5.5~grade$ ), gas purifiers for hydrocarbons, moisture and $O_2$ in He gas, $1/8$ " tubing, nuts and ferrules Vacuum pump accessories like seal and oil
Software	Include software, instruction manual, startup kit and CD. Also include NIST library of mass spectra of organic compounds to identify unknown compounds. Installation by trained engineers and demonstration of sample injection and data analysis should be provided
Other accessories to be	Autoinjector
quoted separately	7 kVA online UPS + batteries
	Desktop computer based on Windows o/s

For technical enquiries contact: Dr. R. Vinu, vinu@iitm.ac.in, +91-9500158723