

Tender No. CIE/TPRA/003/2019

Name of the Equipment: GC-MS

Minutes of Pre-bid meeting held on 1-2-2019 for above is appended below:

Item No.ˆ	Section No	Points raised by Vendor	IITM clarifications
Required specifications	1-2	Headspace trap term is confusing.	<p>Committee has accepted the suggestion and changed the existing specifications as described below, Must have facility to use purge & trap to concentrate contaminants at lower concentrations. Purge & Trap Specifications: - Preferred facilities - cycle time, purge time, desorb, bake, and cool down. System should have capability for purging and trapping the VOCs and further able to transfer to GCMS. Auto Sampler for Purge & Trap having minimum capacity 50 positions or better. It is preferable to have vials supplied along with the system with cooling facility External Transfer Line with temperature up to 200 °C or better It is preferable to have vial heater and foam suppressor. Sample Pathway should have inert coating suitable for VOC analysis. Should have Electronic Mass Flow Controller for flow rate setting. Should be capable of recording pressures for sample logging and automatic leak checking</p>
Required specifications	1-3	Dioxine analysis may not be possible with single quad analyzer	Committee has accepted the suggestion and it is not necessary to consider this specification item.
Required specifications	3	Detector and analyzer specifications must be provided	<p>Committee has accepted the suggestion and following specifications have been approved, ➤ Must have Flame ionization detector (FID)</p>

			<ul style="list-style-type: none"> - With wide linear dynamic range - Linearity greater than 10^7 - Software controlled flow of gases - It is preferable to have detector which can work without any makeup gas. ➤ Must have Electron capture detector (ECD) <ul style="list-style-type: none"> - With operating temperature range from 100 - 400 °C or better - Software controlled temperature protection - Linearity greater than 10^4 ➤ Must have mass spectrometry (MS) detector. <ul style="list-style-type: none"> - With direct interface for capillary column - With temperature setting 50 to 350 C - With wide range vacuum gauge - Software controlled selection of filament voltage - With single/dual filament - With turbo capacity must minimum 250 Ltr - With options for both automatic and manual tuning <p>Signal to noise ratio of 1500:1 for 1pg OFN or better.</p>
Required specifications	4	Number and type of injection ports need to be provided	<p>Committee has accepted the suggestion and following specifications has been approved,</p> <p>Must have autosampler with minimum 100 vials capacity and provision to inject both injectors without dismantling the Autosampler.</p> <p>Injector 1 – Split/Split less Injector Injector 2 – Programable PTV Split/Splitless injector.</p>
Required specifications	7	Whether MS detector mass range of 1200 Da is necessary?	<p>Committee has accepted the suggestion and changed the existing specifications as described below,</p> <p>MS detector should have Mass range up to 1000 Da or more with high speed scan rate >12000 Da/s</p>

Required specifications	16	Which commercial standards should be quoted?	Committee has described requirement as given below, Commercial standards for the calibration of detectors.
Required specifications	19	Which accessories should be quoted?	Committee has described accessories requirement as given below, Please quote essential accessories required for smooth operation of GCMS with aforementioned requirements. The following capillary columns must be provided along with the system, <ul style="list-style-type: none"> a. HP5-ms/DB5-ms or equivalent b. Zebron 5-HT or equivalent c. Heliflex® ATT-35ms or equivalent d. Heliflex® ATT-5ms or equivalent
Required specifications	19	Please provide specifications for the gas sampling accessory	Committee has accepted the suggestion and changed the existing specifications as described below, It is not necessary to consider this specification item. It is not necessary to quote triple quad analyzer and TCD detector and related accessories.
Required specifications	5-2	Chemical ionization source should be positive or negative?	Committee has approved following specifications, Must have Chemical ionization (CI +/-) source
List of contaminants		Many of the detection limits and methods in the attached contaminants list may not be realizable with the single quad analyzer and requested specifications.	Committee has approved following specifications, Minimum Detection limit for VOC to be 1 ppb and for pesticides up to 10 ppb

TENDER NOTICE

Item No.>`	Section No	Points raised by Vendor	IITM clarifications
Tender Notice Instructions to the Bidder	Schedule Payment	Vendors requested for 100% LC advance payment against Performance guarantee	ICSR decided to retain the original Terms and Conditions

GENERAL TERMS AND CONDITIONS

Item No.	Section No	Points raised by Vendor	IITM clarifications
General Terms and Conditions	Warranty	The cost should include 24 months warranty of the overall system and CIP upto Chennai	The cost should include for 5 years warranty of the overall system and CIP upto Chennai
General Terms and Conditions	Technical Bid should comprise of the following:	EMD should not be enclosed in the Technical Bid	The EMD should be sent in a sealed cover