

# INDIAN INSTITUTE OF TECHNOLOGY, KANPUR GT ROAD, KALYANPUR, KANPUR – 208016 UTTAR PRADESH, INDIA

TENDER REFERENCE NO.: IITK/CHM/PSS/2022/02

**Bid Submission End Date- 30.01.2022** 

**Tender Document** 

For

"GCMS with FID & Autosampler"

#### **Tender document**

## Department of Chemistry Indian Institute of Technology Kanpur Kanpur (UP) 208016 India

Tender Ref. No.: IITK/CHM/PSS/2022/02

Bid Submission Start Date: 20.01.2022 End Date: 30.01.2022 at 17:30 hrs

Sealed quotations are invited for flash chromatography Instrument. The detailed specifications and address are given below.

**Tender specifications of GCMS with FID & Autosampler** 

Sr. No.	Item	Description	
1	Gas Chromatograph	Column Oven can accommodate two columns with maximum temperature range up to 450 °C with set point resolution of 0.1 °C. It should support 9 ramps & maximum temperature ramp rates of 100° C/min. Cool down of Oven from 400° to 50° in less than 5 minutes. There should be provision to split the sample to two different Detectors and to get results for Two detectors simultaneously to save time. Touchscreen display on GC.	
2	Injectors: 1 Nos	<ul> <li>Split /Splitess Injector for split, split less with fully EPC with pressure range 0.1 to 100 p.s.i . Maximum temperature should be 400° C.</li> <li>With fully EPC /PPC and pressure range up to 100 p.s.i</li> <li>Split ratio of 7500:1 or more.</li> <li>It Must be provided with splitter to split sample to FID and MS</li> </ul>	
3	Detector (FID): 1 Nos	<ul> <li>Operating Temperature range 50 °C to 400 °C or better</li> <li>Minimum detection limit of 1.2 pg C/sec or better.</li> <li>Data Acquisition rate of 800 hz or better.</li> <li>Linear dynamic range: &gt;107</li> </ul>	
4	Auto Sampler/ Auto Injector: 1 Nos	Auto Sampler with 16 or more vials Area Reproducibility better than 0.5% RSD Syringe up to 10uL as standard or better Vial size: 2mL	
5	Mass Spectrometer	EI source with maximum temperature of 300-degree C or better.  Electron energy up to 70 ev or better  Mass resolution of unit Mass	
6	Quadrupole	Heated monolithic hyperbolic quadrupole with temp of up to 200 Deg C will be preferred.	
7	Mass Range	Up to 1000 amu or better	
8	Scan Rate	Scan rate of 20000 amu/sec or better	
9	Sensitivity	EI scan sensitivity 1500:1, by 1 micro liter injection of 1pg/ul OFN standard scanning from 50 to 300 amu at nominal 272 or better	

10	IDL:	10 fg with injections of OFN (Octafluoronaphthalene)	
11	Turbo Molecular Pump	Single turbo molecular pump with capacity of 250L/sec or more.	
12	Computer & Software	Complete system should be supplied with Computer and printer with Original software with license to control GCMS and other accessories. should be operated from the main chromatography data handling software and integrated with it.	
13	Warranty	5 years on GCMS.	
14	Other terms	Below items must be supplied with the system:  1. Columns: 2 Nos  2. Auto sampler vials: 500 Nos  3. Septa: 100 Nos  4. Ferrules: 10 Nos  5. Liner: 15 Nos  6. Syringe 10 ul: 1 No  7. Filament: 2 No  8. Helium Trap: 1 No  9. Vacuum Pump Fluid: 5 L	
15	Delivery	Price Should be quoted on FOR Basis (Delivery till IIT Kanpur) Custom clearance and Transportation will be done by vendor.	
16	Local Items	Cylinders for Hydrogen, Nitrogen, Zero Air and Helium with Regulators and Panel including Particle filters must be supplied.	

#### Dr. Parthasarathi Subramanian

Department of Chemistry Indian Institute of Technology Kanpur Kanpur 208 016, India Email: parthas@iitk.ac.in

#### **Terms and Conditions:**

- 1. All equipment must be compatible with Indian electrical standards and codes. Engineering documentation on the physical sizes and weights of all major and minor components must be submitted.
- 2. TENDER Specific Manufacturer Authorization Form from OEM Required.
- **3.** The Institute reserves the right of accepting or rejecting any/all quotations without assigning any reason thereof.
- 4. All prices should be F.O.R.
- **5.** Installation by OEM is preferred.

### TENDER ACCEPTANCE LETTER (To be given on Company Letter Head)

	Date:
То,	
Sub: Acceptance of Terms & Conditions of Tender.	
Tender Reference No:	
Name of Tender / Work:	
Dear Sir,	
1. I/ We have downloaded / obtained the tender document(s) for the from the web site(s) namely:	above mentioned 'Tender/Work'
	as per your
advertisement, given in the above mentioned website(s).	
2. I / We hereby certify that I / we have read the entire terms and conditional Page No to (including all documents like annexure(s), of the contract agreement and I / we shall abide hereby by the territherein.	, schedule(s), etc .,), which form part
3. The corrigendum(s) issued from time to time by your department/or into consideration, while submitting this acceptance letter.	ganisation too have also been taken
4. I / We hereby unconditionally accept the tender conditions of about corrigendum(s) in its totality / entirety.	ve mentioned tender document(s) /
5. I / We do hereby declare that our Firm has not been blacklisted/ de Govt. Department/Public sector undertaking.	barred/ terminated/ banned by any
6. I / We certify that all information furnished by our Firm is true 8 information is found to be incorrect/untrue or found violated, then y without giving any notice or reason therefore or summarily reject without prejudice to any other rights or remedy including the forfeit deposit absolutely.	our department/ organisation shall the bid or terminate the contract,

Yours Faithfully, (Signature of the Bidder, with Official Seal)