



**INDIAN INSTITUTE OF SCIENCE EDUCATION AND  
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THIRUVANANTHAPURAM 695016,  
KERALA, INDIA

Date: 21st September 2016

**ADDENDUM TO TENDER NO**

**No: IISER/PUR/8226/16**

**Sub: Supply of GC-MASS-FID.**

The above referred tenders specifications are hereby revised. The new Specifications are attached as **Annexure-I** to this Addendum

Also the due date for submitting quotation is extended to **20<sup>th</sup> October 2016 [4PM]**.

Date of Opening Quotation is 21<sup>st</sup> October 2016[3PM].

**Interested vendors may please submit 2 part tenders towards the revised specifications. Those who already submitted, may revise the quotes accordingly, if needed. If the quote is revised, institute will open & Consider only the revised quote and the initially submitted offers will be sent back without opening.**

Thanking You,



Yours Faithfully

21/09/16

**SUDIN. B. BABU**  
Deputy Registrar (i/c)  
[Purchase & Stores]

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Indian Institute of Science Education and Research Thiruvananthapuram  
CET Campus, Engineering College P.O.  
Thiruvananthapuram 695 016

IISER-TVM, Govt. of India, Ministry of Education

## GC-MS-FID

### General

GC, Mass and FID should be manufactured, supplied and installed by a single vendor to provide a seamless integration between the GC, Mass and FID.

The vendor should have minimum of ten installations in India. At least 10 years spares support need to be provided.

The warranty period for the instrument (along with the supplied accessories) must start from the date of installation).

Along with the technical details provide a tabular column indicating whether the model of the equipment to be supplied by you meets the below mentioned specifications including the general by indicating "Yes" or "No". If "Yes" support the claim by providing original brochures or catalogs or published data.

Optional items should be quoted as individual optional items

Shipping, handling and any other shipping related charges should be quoted separately

### Column Oven

*Dimension:*  $\leq 28 \times 31 \times 18$  cm

*Temperature range:*  $+4$  °C to  $450$  °C or better

*Temperature Ramps:* 20 or higher

*Ramp rate:*  $120$  °C/min or better

*Column oven cooling speed:* 4 minutes or less (from  $450$  °C to  $50$  °C)

### Injectors: 1 No

*Injector type:* Split and Splitless facility

*Split ratio:* 1:7000 or better

*Pressure range:*  $\geq 100$  psi

*Total flow setting range:* 200 mL/min or better for  $N_2$ , 1000 mL/min or better for  $H_2$  or He

### Detectors

#### Flame Ionization Detector(FID)- 1 No

*Minimum detectable level:*  $\leq 1.5$  pg C/s

*Dynamic range:*  $10^7$  or better

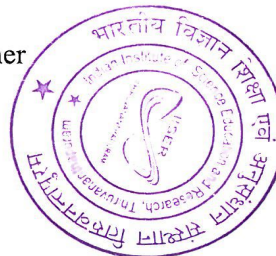
*Maximum operating temperature:*  $450$  °C or higher

*FID data rate:*  $\geq 250$  Hz

### MS Specifications

*Mass Analyzer:* Quadrupole

*Ion source:* EI



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*Ion source temperature:* 150 to 300 °C or better

*Mass range:* up-to 1024 amu or better

*Mass stability:* 0.1 u/48 hours or better

*Scan speed:* 20,000 u/sec or better

*S/N:* 1500:1 or better for 1 pg of OFN

*Instrument detection limit (IDL):*  $\leq 10$  fg

*Pump:* Turbomolecular pump

*Measurement Mode:* Scan, SIM

*Software:* software for acquisition and data analysis should be offered. Should be compatible with windows 7 or newer windows or any open source operating system.

*Network Compatibility:* Should have connectivity through LAN

**Optional (should be quoted as an individual item)**

Additional one injection port (Split and Splitless facility)

Additional one GC column

Additional one syringe

Auto injector

Auto Sampler (all possible variants)

Compatible computer and monitor

Gas cylinder, regulator, gas lines and drying agents



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