Sealed Quotations are invited for purchase of **One Gas Chromatograph** of international quality with the following technical specifications.

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| 1    | Gas Chromatograph         | Dual Column Microprocessor based Gas Chromatograph with temperature controls for injectors, detectors and oven, pneumatic system, auto diagnostic and cooling facility, keyboard entry of process parameters and timing function, digital display of set and actual temperatures of injector, detectors, oven, temperature program status. Installation Kit --- Soap Bubble Flow Meter, Silicon Rubber Septums, Set of Fuses, Set of Tools, Copper Tubing for Gas Connections, Instruction Manual, Dust Cover --- should also be provided. Specifications :  
  - Oven size: 12-15 litres capacity  
  - Column Oven with built-in overheat protection: Operating temperature range: Ambient to 400°C. Temperature stability: ± 1°C  
  - Temperature Programmer: Isothermal temperature range: Ambient to 400°C  
  - 5-10 ramps with ramp rate up to 30°C per min in 0.1°C steps  
  - Injection system: Dual injectors suitable for packed columns and capillary columns. (attachment having SS Diaphragm Pressure Regulator along with Split/Splitless arrangement)  
  - Operating temp. Range: Ambient to 400°C in steps of 1°C  
  - Method Storage: 10 methods files can be stored simultaneously. |
| 2    | Detectors                 | Dual Flame Ionization Detector (FID) with Control Module  
  - Thermal Conductivity Detector (TCD-Four Filaments, Tungsten-Rhenium) with Control Module; should be capable of analysing gases -- H₂, O₂, N₂, CO, CO₂ and CH₄ -- in single injection  
| 3    | Recording Device          | Windows based Dual Channel Chromatography Data Station with Dual Channel Chromatography Software  
| 4    | Columns                   | Capillary Column  
  - SS packed Columns of 1/8” OD x 2 mtr Length  
| 5    | Syringes                  | Hamilton Gas Tight Syringe of 1 ml capacity  
  - Hamilton Liquid Syringe of 10 µl capacity  
| 6    | Warranty, Training        | At least 1 year equipment warranty along with free service; Free training if required  
| 6    | Optional Items            | UPS 3 kVA; Quote also for 5 kVA (1 hour backup for both); CO alarm  
  - Electronic pressure controller (EPC) system for carrier gas |

**Terms & Conditions:**

1. Separate Technical and Commercial Bids are required to be submitted in separate sealed envelopes.  
2. Compliance chart should be clearly attached along with the Technical Bid. Supply the Technical datasheet also. Compliance chart must match with the Technical Datasheet.  
3. If the quote is submitted by the representative of Principals/Manufacturers, a valid Agencyship/Dealership Certificate, specific to this tender at a recent date in original should be enclosed.  
4. Validity of the quotation should be at least 45 days from the date of submission.  
5. Quotation must indicate a delivery schedule, which in no case should exceed 6 weeks from the date of placement of order.  
6. Final prices should include all taxes, delivery and installation charges. Please note that IIT Delhi is exempt from excise duty.  
7. Payment will be made as per IIT/D norms after successful installation.  
8. Only INR quotes will be accepted. Dollar quotes will be rejected.  
9. The bidder company should preferably be ISO 9001 Certified. It should have sold at least 20 GCs of above type or better to reputed educational/research institutes of India and should have been in manufacturing of GCs for 10 years or more. Should also have good after-sales service record and 10 or more satisfied customers in recent years. Give documentary evidence.  
10. Envelope should be superscribed “Quotation for Gas Chromatograph” with our reference number stated on top of the envelope.

The quotations should reach Dr. Ratan Mohan, Dept. of Chemical Engg., IIT Delhi, Hauz Khas, New Delhi -- 110016 by 5 p.m. on or before **12th March, 2014**. Financial bids of only the technically acceptable offers will be opened. Purchase Committee reserves the right to reject any or all bids without assigning any reason thereof.

(Dr. Ratan Mohan)  
Tel: 011-26591033