Tender No.: IITK/CE/EE/2012-13/01 Date: 17 – 10 – 2012

Sealed quotations are invited and should reach the undersigned latest by the **1st Nov, 2012 (Thu)**, for a Gas Chromatograph (GC) for measurement of Volatile organic compounds (VOC) in different environments and at source. It should adhere to the following minimum specifications:

Oven: Capacity of at least 12L, operating temperature range from near ambient to 450°C with the ability to heat up and cool down within 4 minutes or less ; maximum heating rate around 125°C/min. Temperature stability should be ± 0.01°C or less. Very high retention time and peak area repeatability is required. Interface should be user friendly.

Column: Preferably capillary columns with suitable characteristics for routine VOC analysis, one additional column suitable for bio-diesel analysis; columns should be able to work from ambient to 300°C temperature or more.

Injector: Should be able to work with different types of columns, capable of both split and split less injection. Working temperature, pressure and flow range is should be at least (0-400)°C, (0-145) psi and (0-1200) ml/min, respectively with very fine split flow control (split ratio up to 12500:1) and stability.

Desirable: Integrated electronic flow and pressure controller for best combination of column pressure and flow rate during application.

Detector: Flame Ionization Detector (FID) with very high (> 10^7) linear dynamic range, high maximum operating temperature (around 450°C) in steps of 0.1°C, low detection limit (< 1.8 pg C/s), high sensitivity (> 0.03 Coulombs/gC) with flame out warning system, electronic control of carrier gases for better performance, GC must be able to operate with 3 detectors simultaneously. Data acquisition rate should be very fast.

Software: Must be user friendly and easy to operate offering full control over the different instrument operations, ease of data acquisition and embedded instruction manual

Accessories: Any additional accessories required for installation and/or smooth functioning of GC should be mentioned separately with price in INR.

Warranty: Must be 2 years from the date of installation

Maximum educational discount should be applied – this equipment will be used for research and teaching of students.

Sealed quotations should be sent to:

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