Usage Request Form – IITK Users

SEE Material Characterization – GCMS, GC-TCD/FID

Sustainable Energy Engineering, IIT Kanpur

Date:

Name (PF/Roll No):_____	Supervisor's Name:_____
Email/Phone No:_____	Department:_____

Analysis ☐ GCMS ☐ GC-TCD/FID			**Parameters**			
S. No.	**Sample Name/ Code**	**Hazardous (Y/N)**	**Solvent & Its B. P.**	**Sample Solvent & Injection Vol. (mL)**	**Flow Rate (mL/min)**	**Expected Mass & Its B.P.**

Required Column

GCMS	**GC-TCD/FID**
☐ **HP-5 MS -** Higher Hydrocarbon	☐ **PoraPLOT U -** Light hydrocarbons, permanent gases, VOCs
☐ **HP-5 MS UI -** Semivolatiles, Halogenated Compounds, Amines	☐ **CP-Molsieve 5A:** O_2, N_2, CO, CH_4, Ar - permanent gas separation
☐ **DB-WAX -** Analyzing compounds with polar functional groups	☐ **MS 5A -** Permanent gases and small molecules
☐ **DB-624 -** Volatile Organic Compounds	☐ **HayeSep Q -** C_1-C_4 hydrocarbons, CO_2, light alcohols, H_2S

Sample Preparation Checklist:

☐ Sample is fully soluble in a suitable organic solvent.
☐ Sample and Calibration Standards filtered through ≤ 0.22 μm filter.
☐ Sample volume is at least 1 mL per injection.
☐ Sample solvent & chemistry compatible with selected column/detector (no strong acids/bases/polymers)
☐ If hazardous, MSDS or safety info provided.

LAB USE	Date		Booking No		**User's Signature**
	Done By		Log Page No		

Kindly transfer Rs. _____ (_____ in words) from Project No. _____, expiring on _____, to Account No. LDA/IITK/SEE/2025265.

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Head/PI/Supervisor **Facility Coordinator**