Department of Civil Engineering, NIT Calicut

MASS SPECTROPHOTOMETRY (MS)

Photo of Instrument:



Instrument Name	Mass Spectrophotometry (MS)				
Instrument Model & Serial No.	Clarus SQ8S				
Instrument Make	Perkin Elmer				
Category of Instrument	Characterization and Testing				
Description of Instrument	Mass spectrometry is an analytical tool useful for				
	measuring the mass-to-charge ratio (m/z) of one or				
	more molecules present in a sample. These				
	measurements can often be used to calculate the				
	exact molecular weight of the sample components				
	as well.				
Instrument Technical Description	Scan Rate-Fully variable up to 12,500 amu/sec				
and Major Specifications (This	Mass Range-1.0-1,200 (amu)				
Specifications Limited to Major 5)	Turbomolecular pump capacity 751/sec				
Application of Instrument (Limited	It is an efficient method to elucidate the chemical				
to Major 4 or 5)	composition of a sample or molecule. More				

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	recently, it has been used to classify biological				
	products, in particular proteins and protein				
	complexes, in a number of species. Usually, mass				
	spectrometers can be used to classify unknown				
	substances by molecular weight measurement, to				
	measure known compounds, and to determine the				
	structure and chemical properties of molecules.				
Type of Sample Required for	Aqueous sample				
Analysis / Testing (Quantity, Pre-	•				
Preparation, State etc.)					
Guidelines for Sample Submission –					
User Instructions					
Types of Analysis / Testing	Volatile Organic compounds				
Faculty In-Charge Name / Email /	Dr.George K Varghese / gkv@nitc.ac.in / 9744341214 &				
Contact	Dr. Bhaskar S / bhaskars@nitc.ac.in / 9742720843				
Technical Staff Name / Email /	Amardip Kumar Vishvakarma				
	amardeepvns786@gmail.com				
Contact					
Location of Instrument	Environmental Engineering Research lab				
Other Details					

User Charges:

S.NO.	Type of Analysis / Testing	Internal - within Department of NITC	Internal - Other Departments NITC	External Academic Educational Institutes	National R&D Labs	Industry
1						
2						
3						

Slot Booking and Payment Work Flow: