Department of Civil Engineering, NIT Calicut



ATOMIC ABSORPTION SPECTROPHOTOMETER

Department of Civil Engineering, NIT Calicut

	And for regulated labs, the Syngistix Enhanced				
	Security [™] option is available that fulfills their				
	special needs, such as those operating under the rules				
	of 21 CFR Part 11/EU Annex 11.				
Instrument Technical Description	Heavy metals Analysis				
and Major Specifications (This	Pinnacles 900 f- 8 lamp housing compatible with				
Specifications Limited to Major 5)	Electrodeless Discharge Lamp and Hollow Cathode				
Specifications Ennited to Major 3)	Lamp				
Application of Instrument (Limited	Atomic absorption spectroscopy is utilized across				
	many industries and is instrumental in the detection				
to Major 4 or 5)	of metals within a sample. As such, this process is				
	commonly utilized in pharmacology, archaeology,				
	manufacturing, mining, and forensics				
Type of Sample Required for	Liquid sample, Quantity vary according to				
Analysis / Testing (Quantity, Pre-	concentration of sample				
Preparation, State etc.)	1) For quantitative analysis, you need to provide				
Guidelines for Sample Submission	standards for the respective element(s).				
– User Instructions	2) Each element and all standards will be considered				
	as sample and charged accordingly.				
	3) We need minimum 20 mL liquid sample filtered				
	through 0.2 µm filter for each element.				
	4) If you do not provide standards then we will				
	provide you only the absorbance of the elements.				
	5) All the samples (standards + unknowns) will be				
	processed using the method provided by you				
	6) We will provide you raw data only				
	7) We will process your samples once we got order				
	for minimum 20 samples.				
Types of Analysis / Testing	AAS is an analytical technique used to determine				
	how much of certain elements are in a sample. It uses				
	the principle that atoms (and ions) can absorb light at				
	a specific, unique wavelength. When this specific				
	wavelength of light is provided the energy (light) is				
	absorbed by the atom				
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Location of Instrument	Environmental Engineering Research lab		
Other Details	N/A		

User Charges:

S.NO.	Type of	Internal -	Internal -	External	National	Industry
	Analysis /	within	Other	Academic	R&D	
	Testing	Department	Departments	Educational	Labs	
		of NITC	NITC	Institutes		
1	Liquid	200 per	200 per sample per metal	400 per	400 per	1000 per
		sample per		sample per	sample	sample per
		metal		metal	per metal	metal

Slot Booking and Payment Work Flow: