INDIAN INSITUTE OF TECHNOLOGY MADRAS

Department of Civil Engineering [EWRE]

Chennai-600 036

Requisition Form for ICP-OES Analysis (Internal / External Users)

Sample Submission

 The users should fill up the form (given below) and submit it with the sample

Each sample must be listed separately.

 External samples will be analysed in que at a fixed rate Payments

 External users, please call and confirm the status of the instrument and then

Sample required

Sample required is about 10-20mg for solids and approximately 25ml for liquids. Samples should be non-explosive and non-corrosive.

- **Charge list**

	Value Per Injection		
	IIT M	**Other Universities**	**Industries**
Internal Testing & External testing	Rs:1000/-	Rs:2000/-	Rs:3000/-

Following conditions applies:

1.Sample preparation charges extra

2.Standard are available for limited number of chemicals. Others the standards should be brought along with samples

3.Method development for new chemicals will be charged extra.

4. Microwave digestion charges extra, per sample (up to 5 sample's) Rs.650

Contact:

In-Charge / Prof. Indumathi M Nambi

Operator:

Lab: 526, ED building,4th floor.

Department of Civil Engineering, IIT Madras, Chennai 600 036.

Department of Civil Engineering (EWRE)

Indian Institute of Technology Madras-36

Requisition Form for ICP-OES

Name & Roll No	
Internal / External	
ICP-OES	
No of Samples	
Academic / Industry /R&D	
Email.ID	
Institution Name	
Bill Claiming Address	
Mobile No	
Your Signature	
Required Elements:	
Guide signature & seal (In case of students/ research scholars)	

Instructions to users for ICP-OES analysis

- This technique is specifically used to quantify metals and metalloids present in the sample at trace, minor and major concentrations.

- Acid treated water samples are acid extract of soil samples should be filtered and brought for analysis

- Mineral acids such as HCl, HNO 3 , H 2 SO 4 and aquaregia can be used for dissolution of samples. Use very minimum quantity say (1-5 ml) of the acid.

- Pl.do not use HF for dissolution as we do not have HF resistant nebulisers, spray chambers and torch tube.

- Highly acidic/ highly alkaline solutions will extinguish the Argon plasma.

- After dissolution make up the samples to a known volume with de-ionized water and filter it thoroughly using Whatmann41 filter paper and submit only clear aqueous solutions for analysis.

- 15 ml of sample solution is necessary for analysing 2 elements with 3 replicates.

- An appropriate blank solution (50ml) is also necessary.
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- Store the sample solutions preferably in plastic containers. Glass will absorb metal ions on storages.