



External users only

DEPARTMENT OF CHEMISTRY, I.I.T Madras

ICP-OES Request Form

Name of the Student: _____

Date: _____

Name of the Guide : _____

Tel no: _____

University /College: _____

email: _____

S.No.	Sample code	Elements to be Analyzed	Conc (in ppm)

The samples submitted herewith for ICP-OES are for the research work of the above mentioned student/researcher only. Acknowledgments for the data gathered on this machine will be made in the resulting publications and thesis

Signature of the Guide

DEPARTMENT OF CHEMISTRY, I.I.T Madras
ICP-OES Request Form

Name of the Student: _____

Date: _____

Name of the Guide : _____

Tel no: _____

University /College: _____

email: _____

S.No.	Sample code	Elements to be Analyzed	Conc (in ppm)

The samples submitted herewith for ICP-OES are for the research work of the above mentioned student/researcher only. Acknowledgments for the data gathered on this machine will be made in the resulting publications and thesis

Signature of the Guide

Instructions to users for ICP-OES analysis

1. This technique is specifically used to quantify metals and metalloids present in the sample at trace, minor and major concentrations.
2. Mineral acids such as HCl, HNO₃, H₂SO₄ and Aquaregia can be used for dissolution of samples. Use very minimum quantity say (1-5 ml) of the acid.
3. Pl. Do not use HF for dissolution as we do not have HF resistant nebulizers, spray chambers and torch tube.
4. Highly acidic/ highly alkaline solutions will extinguish the Argon plasma.
5. 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.
6. Enormous dilution will introduce dilution error.
7. 10 ml of sample solution is necessary for analyzing 2 elements with 3 replicates
8. An appropriate blank solution (50ml) is also necessary.
9. Store the sample solutions preferably in plastic containers. Glass will absorb metal ions on storage.
10. Download the ICP-OES requisition form from Chemistry Department Instrument Facility website fill all the necessary information it should be submitted in the CY office along with DD and samples.
11. Elements of interest and weight and volume of the liquid samples should be specified in the requisition form
12. Please contact our ICP lab at 091-044-2257 5211 for any clarifications
13. Kindly adhere to these instructions to enable the analyst to end up with accurate results for your samples.