

ICP-OES

Principle

ICP-OES is a spectroscopic technique used for the quantitative determination of the elemental composition of aqueous samples. Nearly all elements can be detected via ICP-OES with the notable exceptions being H, C, N, O, Ar, and halogens. Additionally, organic samples can also be analyzed using a specialized solvent and sample introduction system. Solid samples must be dissolved in water or acid digested prior to analysis. ICP-OES is a highly sensitive atomic spectroscopy technique able to provide limits of detection in the range of $\mu\text{g/L}$ (10s of ppb) for most elements.

Capabilities

- Elementary Analysis

Assets

	Asset	Details
	PerkinElmer Avio® 550 Max	ICP-OES spectrometer with axial and radial view
	Nabertherm LE 2/11/R6	Compact Muffle Furnace for sample preparation (GROSSI)
	Heraeus T 6030	Heating Drying Oven for sample preparation (GROSSI)

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