



MODERNWATER

What is Voltammetry?

Voltammetry is a method for determining the chemical makeup of a sample substance by measuring electrical activity, or the accumulation of chemicals, on electrodes placed in the substance.

Stripping Voltammetry is an analytical technique that is used to detect trace metals like arsenic, cadmium, lead, or mercury. These metals are usually toxic to humans and animals (and plants in some cases). It does not detect metals such as sodium, potassium, calcium and magnesium.

It works by electroplating these metals onto an electrode. This concentrates the metals. The metals on the electrode are then sequentially stripped off, which generates a current that can be measured.

- The current is proportional to the amount of metal being stripped off.
- The potential (voltage) at which the metal is stripped off is characteristic for each metal.

This means the metals can be identified, as well as quantified.

This diagram shows how different metals can be identified at different voltages.

