PTZ

Principle

In an equilibrium state with or without polarisation the potential of a working electrode is linked to the amount of active species in the conductive solution. The difference of potential between the working electrode and a reference electrode (fixed potential) allows the monitoring of the concentration evolution during the addition of a reagent.

Multiple reactions can be used in potentiometry, redox, precipitation, acid-base, ion pairing, complex formation… Direct addition can be used for fast chemical reaction, the potential indicates the end of the reaction induced by a stoechiometric addition of reagent.

Back titrations are used for slower reactions, after an excess addition, the reagent is back titrated by another reagent on a faster reaction.

Capabilities

- Halide anions by direct titration using a precipitation and silver working electrode
- Strong and weak acid or base determination in organic or inorganic products using an aqueous or non-aqueous solvent
- End group analysis for molecular or polymers
- Non Ionic Surfactant analysis using specific working electrode
- Oxidizing power or reducing power with redox-electrode

Assets

	Asset	Details
	**Metrohm 904 Titrando**	High-end titrator with additional dosing unit, internal buret drive and stirrer for potentiometric titration
	**Metrohm 716 Titrino**	High-end titrator with internal buret drive and stirrer for potentiometric titration
	**Lovibond Thermoreactor and Photometer COD vario (209250)**	Complete COD-measurement set-up

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