

Electrochemical Methods (KDIT25)

syllabus

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Basic electrochemical methods

- Static electrochemical methods
- Dynamic electrochemical methods
- Potential step methods
- Rotating disk electrode measurements

Fundamental operation of electrochemical instruments

- Multimeter, conductometer
- Potentiostat/galvanostat

Electrochemical cell designs

- Two vs. three electrode setups
- Membrane separation and its implications

Basics of electrochemical impedance spectroscopy

- Mathematical background
- Measurements on passive elements
- Measurements in real system
- Data interpretation and modeling

Introduction to combined electrochemical methods