# PROCESS OF LAROGRAPHY TITRATION AND APPLICATION

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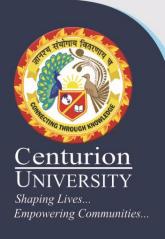
#### **POLAROGRAM**

It is the current voltage curve obtained during the polarographic titration. In this these 3 current are of important,

ir (residual current) which is the current obtained when no electrochemical change takes place.

Ia/II (average current/limiting current) is the current obtained by averaging current values throughout the life time of the drop while

id (diffusion current) which is the current resulting from the diffusion of electro active species to the drop surface.



## **PROCEDURES**

- Materials Required: 1. Polarographic Instrument. 2. Beaker. 3. 10 mL Pipette. 4. Wash bottle. 5. 100 mL volumetric flask.
- Reagents required: 1. Cadmium standards.
  - 2. 2 M KCl solution.
  - 3. 0.2% gelatin solution.
  - 4. Distilled water.

# Centific CEDURE of A AUTOMATED PORAROGRAM

Expowers the concentration from the list.

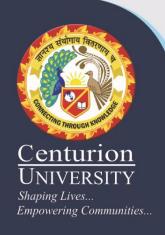
- Click "Load Cadmium Sample" button.
- Select "Scan Analysis".
- Click "Plot Graph".
- Select the unknown concentration from the concentration list. 

  Repeat the steps 2, 3 and 4.
- Enter the concentration values on the worksheet.
- Plot calibration curve by clicking the "plot" button on the worksheet.
- Calculate the unknown concentration value from the calibration curve



## Shaping PHARMACEUTICAL APPLICATIONS OF POLAROGRAPHY

- (1) Dissolved oxygen and peroxides.
- (2) Trace metals and metal-containing drugs.
- (3) Antiseptics and insecticides.
- (4) Vitamins.
- (5) Hormones.
- (6) Antibiotics.
- (7) Alkaloids.
- (8) Blood serum and cancer diagnosis



# THANK YOU