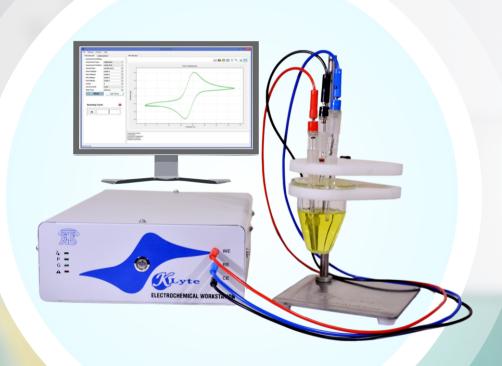
# ELECTROCHEMISTRY LAB KIT

Let the electrifying experiments begin!



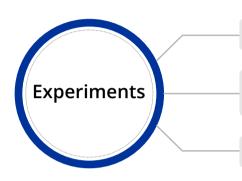


Designed & Developed by

KANOPY TECHNO SOLUTIONS PVT. LTD.

# Why ECLyte?

- → A plug & play kit with step by step instructions
- Specially designed according to UG & PG Courses
- Includes all the necessary equipment, accessories, electrodes & consumable
- Experiments can be added or modified according to need of academic course structure
- Includes experiments which motivate students/researchers to solve real world problems
- To help filling the gap of electrochemical experiments in existing academic course structures



Electrochemical Bromine evolution at Platinum electrode

Cyclic voltammetric study of Potassium Ferrocyanide/ Ferricyanide redox couple at Platinum electrode

Electroplating of Copper on Steel Substrate

# What's Included?









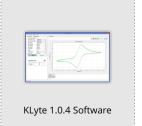
















### K-Lyte 1.0 Electrochemical Workstation

K-Lyte 1.0 is a basic Potentiostat dedicated to initiate electrochemistry research at undergraduate and postgraduated level. It is capable of performing the following important basic electroanalytical techniques.

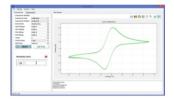
- Linear Sweep Voltammetry
- Cyclic Voltammetry
- → Chronoamperometry

The instrument specification is as follows:

Specifications (Detailed specs can be found in Manual)	
Cell Connection	2, 3
Applied Voltage Range	±15V
Measured Current Range	10mA



### **Software**



K-Lyte software is a user-friendly software which is developed by keeping the user's comfort in mind. It is very lightweight that runs in your operating system smoothly on the Windows platforms (Windows 7 or later versions). It allows the user to effectively set the experimental parameter for each technique and view/save data both as image and in .xls/.csv formats.

## A Beginners Guide to Experimental Electrochemical Science and Engineering

This is the study material in the form of a booklet that is included in the Electrochemistry Lab Kit. This booklet is meant to supplement to experimental infrastructure provided by KTS. It has been organized under three chapters. Chapter 1 provides an overview of the thermodynamics, kinetics and transport in electrochemical systems. Chapter 2 gives a general overview of different electroanalytical techniques. Chapter 3 focuses on experimental strategies and methods with some simple experiments that can be performed with KLyte potentiostat. This booklet is brief but extensively referenced so that these references can pave the way towards increasing one's depth in the area of electrochemistry.



### Cell Setup, electrodes, and other accessories

The electrodes included in the kit are

- → An easy-to-assemble electrochemical cell setup with stand (50 ml)
- → One platinum wire working electrode
- → One platinum-mesh counter electrode
- → One Silver-Silver Chloride reference electrode

### Other necessary items include

- → One working electrode holder to hold different kinds of substrate.
- One pair of alligator clips.
- → Set of three banana cables meant for electrically connecting the working electrode, counter electrode and reference electrode with the instrument.
- → All the chemicals (except acid) and other materials required to perform the experiments have been provided within the kit with proper descriptions.





# **About Kanopy**

Kanopy Techno Solutions is a renowned organization for high-quality research & development solutions in electrochemistry. Our core team includes experienced professors and researchers of the renowned technological institutes in India. We believe in high-quality research in a simplified manner. Kanopy Techno Solutions Pvt. Ltd. is a spin-off company from IIT Kanpur. Currently, the company is situated at TechnoPark, IIT Kanpur (India's one of the largest and renowned research hubs) and also has deep collaborations with different research labs of IIT Kanpur for the company's product R&D. We provide a complete solution for electrochemical laboratory instruments and accessories, which include Potentiostat, Galvanostat, electrodes, and various electrochemical cells. We also offer electrochemistry experiment kits for basic, intermediate, and advanced levels according to the curricular requirements of different academic and industrial organizations. Our various training programs, such as student internships, workshops, QIPs in collaborations with IITK, etc., promote research culture in the colleges, universities, institutes, and industries, in the field of electrochemical science and engineering.



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