

Ele ctrochemistry & Corrosion

Date	Venues	(\$)Fees	Book your seat
08 Dec -12 Dec 2024	Cairo	2900	Register Now

Course Overview

This course is given as an introduction to the use of electrochemical techniques in corrosion applications. Emphasis is placed on the use of modern instruments to acquire pertinent data. Participants will have the opportunity to operate state-of-the-art instruments in laboratory sessions designed to complement the lecture material Techniques for proper interpretation of data for use in corrosion pre- diction and prevention are emphasized. Examples where these methods have been successfully utilized are presented

Course Objective

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Who Should Attend?

- · Mechanical Engineers
- Production Engineers
- Chemists
- · Department Managers

Course Outline

- CHEMISTRY AND ELECTRICITY
- ELECTRONEUTRALITY
- ELECTRODES AND ELECTRODE REACTIONS
- INTRODUCTION TO CORROSION
- BASIC THERMODYNAMICS
- POLARIZATION CURVES
- ELECTROCHEMICAL CORROSION
- CONTROL OF CORROSION
- POLARIZATION RESISTANCE
- OHMIC RESISTANCE
- ELECTROCHEMICAL IMPEDANCE SPECTROSCOPY
- EFFECTS OF FLUID VELOCITY
- CURRENT DISTRIBUTION
- CATHODIC PROTECTION

Training Methodology

- Presentation & Slides
- Audio Visual Aids
- Interactive Discussion
- Participatory Exercise
- Action Learning
- Class Activities
- Case Studies
- Workshops
- Games & Role plays

