



### 2-Days Workshop

on

# Electrochemistry Tools for Corrosion Analysis

## Highlights



Completion Certificate



Discussion In Detail



Experts led Training



10+ hours Offline training

Special session for doubt clearance of the participants

Selected participants will be allowed to do short term projects in the institute

### Registration Link:

<https://cas.res.in/workshopreg.html>



### Coordinator

**Dr. Gopal Ji**

Assistant Professor

Centre for Advanced Studies

Dr. A.P.J. Abdul Kalam

Technical University, Lucknow

**Eligibility:** B. Tech (4th Year ME / MME/ AC/CE), B.Sc/M.Sc chemistry and all interested students

**Date :** 3-4 June 2022, **Mode:** Offline,

**Number of Seats:** 30

**Registration Fee – Free**

**Limited seats (First Come First Serve)**

**Last Date of Registration: 30 May 2022**

### Contents

- ✓ Corrosion Definition and examples, Origin of corrosion, Basics of Corrosion
- ✓ Need and Techniques of Corrosion Monitoring,
- ✓ Electrochemical Tools for Measurements: Detailed discussion about EIS, Tafel Polarization, Linear Polarization Resistance and OCP

Days

Session

Forenoon

Afternoon

Day 1

Origin of Corrosion, Electrochemical theory of corrosion, Need for corrosion monitoring, Tafel Polarization curves, Mixed potential Theory,  $E_{corr}$ ,  $I_{corr}$ , Tafel Extrapolation, Key findings based on Tafel curves, Solved examples

**Hands-on Session**  
Tafel Polarization curves and interpretation

Day 2

Nyquist and Bode Curves, Curve Fitting, EEC, Interface analysis, Solved examples

**Hands-on Session**  
EIS experiments and interpretation



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