- Definition and Importance
- Electrochemical Mechanisms
- Corrosion Tendency and Electrode Potentials
- Polarization and Corrosion Rates
- Passivity
- Iron and Steel
- Effect of Stress
- Atmospheric Corrosion of Iron and Other Metals
- Corrosion of Iron and Other Metals in Soil
- Oxidation and Tarnish
- Stray-Current Corrosion
- Cathodic Protection
- Metallic Coatings
- Inorganic Coatings
- Organic Coatings
- Inhibitors and Passivators
- Treatment of Water and Steam Systems
- Alloying for Corrosion Resistance
- Stainless Steels
- Copper and Copper Alloys
- Aluminum and Magnesium
- Lead
- Nickel and Nickel Alloys
- Cobalt and Cobalt Alloys
- Titanium, Zirconium, and Tantalum
- Silicon-Iron and Silicon-Nickel Alloys
- Problems
- Appendix
- Index