

CONTENTS

	PAGE
CHAPTER I	1
The Formation of Simple Ions	
CHAPTER II	5
The Formation of Complex Ions	
CHAPTER III	9
Ions in Solutions of Electrolytes	
CHAPTER IV	13
The Conductivity of Solutions	
CHAPTER V	17
Quantity of Electricity and Faraday's Laws	
CHAPTER VI	21
Faraday's Laws and Current Efficiency	
CHAPTER VII	26
The Ionization of Water and the Significance of pH	
CHAPTER VIII	30
The Determination of pH Values by Electrometric Methods	
CHAPTER IX	34
The Theory of pH Indicators	
CHAPTER X	39
Buffer Solutions and the Determination of pH Values by Indicators	
CHAPTER XI	44
The Significance of Reversible Electrode Potentials	
CHAPTER XII	48
Standard Electrode Potentials and their Applications	
CHAPTER XIII	52
Electrode Potentials and the Displacement of Metals	
CHAPTER XIV	
The Deposition Potentials of Metals	
CHAPTER XV	61
Hydrogen Overvoltage and Its Importance in Metal Deposition	
CHAPTER XVI	66
Concentration Polarization and the Diffusion Layer	
CHAPTER XVII	71
Electrolysis of Complex Cyanide Solutions	
CHAPTER XVIII	76
Conditions Affecting the Form of Electrodeposited Metals	
CHAPTER XIX	81
The Behavior of Anodes: Passivity	
CHAPTER XX	
The Causes and Prevention of Corrosion	