

Lecture Experiments in Analytical Chemistry

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Аа	a	Зз	z	Пп	p	Цц	ts
Бб	b	Ии	i	Рр	r	Чч	ch
Вв	v	Кк	k	Сс	s	Шш	sh
Гг	g	Лл	l	Тт	t	Щщ	shch
Дд	d	Мм	m	Уу	u	Ээ	e
Ее	e	Нн	n	Фф	f	Юю	yu
Жж	zh	Оо	o	Хх	kh	Яя	ya

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CONTENTS



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Preface	15
Chapter I. General Information	17
Equipment of the Auditorium	17
Demonstration Material	23
Preparation and Conduction of an Experiment	29
References	31
Chapter II. Introduction to Qualitative Analysis	32
Characteristics of Analytical Reactions	35
Sensitivity of Reactions	35
Comparison of the Sensitivity of Reactions	36
<i>Experiment 1.</i> Comparison of Colour Intensity of Copper Complexes	36
<i>Experiment 2.</i> Comparison of Colour Intensity of Iron (III) Complexes	37
<i>Experiment 3.</i> Determination of the Sensitivity of Reactions by Diluting a Solution	38
High-Sensitive Catalytic Reactions for Detecting Elements	40
<i>Experiment 4.</i> Catalytic Reaction for Detecting the Palladium Ion	40
<i>Experiment 5.</i> Catalytic Reaction for Detecting Cobalt Traces	41
Increase in the Sensitivity of a Reaction by Solvent Extraction	42
<i>Experiment 6.</i> Extraction of Iron Thiocyanate	43
<i>Experiment 7.</i> Extraction of Iodine by Chloroform	43
Increase in the Sensitivity of a Reaction by Introducing Water-Miscible Organic Solvents	44
<i>Experiment 8.</i> Formation of Iron Thiocyanate in the Presence of Acetone	44
Increase in the Sensitivity of a Reaction by Flotation	45
<i>Experiment 9.</i> Flotation of Nickel Dimethylglyoximate	45
Increase in the Sensitivity of a Reaction by Forming Mixed Complexes	46
<i>Experiment 10.</i> Formation of a Molybdovanadophosphoric Heteropoly Acid	46
Increase in the Sensitivity of a Reaction by the Multiplication Method	47

<i>Experiment 11.</i> Detection of the Iodide Ion by the Multipli- cation Method	48
Selectivity and Specificity of Reactions	49
<i>Experiment 12.</i> Selective Detection of Metal Ions in the Form of Sulphides	49
<i>Experiment 13.</i> Selective Reaction Between the Nickel Ion and Dimethylglyoxime	51
<i>Experiment 14.</i> Specific Reaction for Detecting Ammonium Ions	52
Methods of Qualitative Analysis	53
Microcrystalloscopic Analysis	53
Pyrochemical Analysis	55
Flame Coloration	55
<i>Experiment 15.</i> Flame Coloration by the Salts of Alkali and Alkali-Earth Metals	55
<i>Experiment 16.</i> Flame Coloration by Boron Compounds	57
Sublimation	58
<i>Experiment 17.</i> Sublimation of Salts and Dry Distillation of Organic Compounds	58
Spot Tests	59
<i>Experiment 18.</i> Detection of the Ferric Ion by Potassium Fer- rocyanide	60
<i>Experiment 19.</i> Separation and Simultaneous Detection of Fer- ric, Nickelous and Cupric Ions	61
<i>Experiment 20.</i> Separation of a Dye Mixture by the Spot Test Method	61
Analysis by Grinding Powders	63
<i>Experiment 21.</i> Detection of the Nickel Ion	63
<i>Experiment 22.</i> Detection of the Cobalt Ion	63
Luminescence Analysis	64
<i>Experiment 23.</i> Detection of Organic Compounds	66
<i>Experiment 24.</i> Detection of Uranic Salts	66
<i>Experiment 25.</i> Detection of the Aluminium Ion by Morin	67
<i>Experiment 26.</i> Detection of the Lithium Ion by 8-Hydroxyqui- noline	68
<i>Experiment 27.</i> Luminescence of Crystal Phosphors	69
<i>Experiment 28.</i> Detection of the Tin Ion by the Crystal Phos- phor Luminescence	70
<i>Experiment 29.</i> Detection of the Copper Ion by a Chemilumi- nescence Reaction with Luminol and Hydrogen Peroxide	71
References	72
 Chapter III. Introduction to Quantitative Analysis	 74
Gravimetric Analysis	77
Titrimetric Analysis	77
References	79
 Chapter IV. Equilibrium in Homogeneous Systems	 81
Ions in Solution	81
<i>Experiment 30.</i> Aquo Complexes of the Cobalt Ion	84
<i>Experiment 31.</i> Cobalt Ion Dehydration on Heating	84

<i>Experiment 32.</i> Inert Aquo Complex of the Chromic Ion . . .	85
<i>Experiment 33.</i> State of Ions and Molecules as Dependent on the Polarity of the Solvent. Iodine Molecule Solvates . . .	86
<i>Experiment 34.</i> Chemical Activity of the Iodine Molecule Solvates . . .	86
Displacement of Chemical Equilibrium in Solutions . . .	87
Effect of Ion Concentration on Equilibrium Displacement . . .	88
<i>Experiment 35.</i> Equilibrium in Copper Chloride Solution . . .	88
<i>Experiment 36.</i> Equilibrium in Iron Thiocyanate Solution . . .	89
Equilibrium Displacement by the Removal of Reaction Products . . .	90
<i>Experiment 37.</i> Reaction Between Potassium Iodide and Arsenic Acid in Frozen Aqueous Solution . . .	90
Effect of Organic Solvents on Equilibrium . . .	91
<i>Experiment 38.</i> Cobalt Thiocyanate Dissociation . . .	91
Effect of pH on Equilibrium . . .	92
<i>Experiment 39.</i> Equilibrium in Potassium Chromate Solution . . .	92
<i>Experiment 40.</i> Equilibrium in the Ferric Ion-Sulphosalicylic Acid System . . .	93
Equilibrium Displacement under the Action of Light . . .	94
<i>Experiment 41.</i> Photochemical Reduction of Thionine . . .	94
Effect of Temperature on Equilibrium . . .	94
<i>Experiment 42.</i> Heating the Crystal Hydrate of Sodium Acetate . . .	94
References . . .	95

Chapter V. Acid-Base Equilibrium 96

Acid-Base Equilibrium in Aqueous Solution	97
Buffer Solutions	97
<i>Experiment 43.</i> Buffer Action of Acetate Buffer Solution . . .	97
<i>Experiment 44.</i> Buffer Action of Phosphate Buffer Solution . . .	98
Hydrolysis	99
<i>Experiment 45.</i> Antimonous Salt Hydrolysis	100
<i>Experiment 46.</i> Hydrolysis of Sodium Tungstate	101
<i>Experiment 47.</i> Effect of Temperature on the Degree of Sodium Dihydrophosphate Hydrolysis	101
<i>Experiment 48.</i> Effect of Temperature on the Degree of Ferric Chloride Hydrolysis	102
<i>Experiment 49.</i> Effect of the Iron Ion Charge on the Degree of Hydrolysis	103
<i>Experiment 50.</i> Suppression of Ferric Salt Hydrolysis by Complex Formation	104
Acid-Base Equilibrium in Non-aqueous Solvents	105
<i>Experiment 51.</i> Differentiating Effect of Solvents on Acid Strength	106
Acid-Base Indicators	107
Colour Indicators	107
<i>Experiment 52.</i> Colour Transition of Methyl Orange	110
<i>Experiment 53.</i> Determination of the pH of a Solution by a Universal Indicator	111
<i>Experiment 54.</i> Effect of Temperature on the Colour of Phenolphthalein	112

Fluorescent Indicators	113
<i>Experiment 55.</i> Titration of Coloured Acid Solutions in the Presence of Acridine	113
Chemiluminescent Indicators	115
<i>Experiment 56.</i> Acid Titration in the Presence of Luminol	115
References	116
 Chapter VI. Equilibrium in Heterogeneous Systems. Precipitate and Its Properties	 117
Distribution of a Solute Between Two Immiscible Liquids	118
<i>Experiment 57.</i> Distribution of Iodine Between Chloroform and Water	118
<i>Experiment 58.</i> Extraction of Cobalt Thiocyanate by Isoamyl Alcohol	119
<i>Experiment 59.</i> Extraction of Bismuth Iodide Complex	119
<i>Experiment 60.</i> Extraction of the Vanadic Ion by <i>N</i> -Benzoyl-phenylhydroxylamine	120
Solid-Solid Equilibrium	121
<i>Experiment 61.</i> Interaction of the Precipitates of Lead Sulphate and Zinc Sulphide	121
Precipitate-Solution Equilibrium	121
Precipitate Formation	121
Method of Originating Reagents (Homogeneous Precipitation)	123
<i>Experiment 62.</i> Precipitation of a Nickel Ion by Dimethylglyoxime	123
<i>Experiment 63.</i> Precipitation of the Copper Ion by Salicylalimine	125
<i>Experiment 64.</i> Precipitation of Barium Sulphate by Dimethyl Sulphate	126
Perfection of the Crystal Structure of a Precipitate	126
<i>Experiment 65.</i> "Ostwald Ripening" of a Precipitate	127
Washing of Precipitates	128
<i>Experiment 66.</i> Washing of Coloured Sand with Water	128
Dissolution of Precipitates	129
<i>Experiment 67.</i> Dissolution of Mercury Iodide with the Formation of Mercury (II) Complexes	130
<i>Experiment 68.</i> Dissolution of Calcium Fluoride by Complex Formation	131
<i>Experiment 69.</i> Effect of Common Ion on the Solubility of Barium Sulphate	132
Coprecipitation	132
Adsorption	133
<i>Experiment 70.</i> Adsorption of Methylene Blue by the Silicic Acid Gel	134
<i>Experiment 71.</i> Adsorption of Litmus by Aluminium Hydroxide and Barite Powder	135
Isomorphous Coprecipitation	136
<i>Experiment 72.</i> Coprecipitation of the Ions of Some Elements with Zinc Mercurotetrathiocyanate	138

<i>Experiment 73.</i> Coprecipitation of Microquantities of Radioactive Cobalt with Zinc Mercurotetrathiocyanate	139
<i>Experiment 74.</i> Coprecipitation of Potassium Permanganate with Barium Sulphate	141
<i>Experiment 75.</i> Coprecipitation of the Cupric Ion with Cadmium Ferrocyanide	142
Precipitation Titration	143
<i>Experiment 76.</i> Titration of Sodium Chloride by Silver Nitrate in the Presence of Fluorescein as Adsorption Indicator	144
<i>Experiment 77.</i> Titration of Lead Nitrate by Potassium Chromate in the Presence of Congo Red as Adsorption Indicator	144
<i>Experiment 78.</i> Titration of Sodium Chloride by Silver Nitrate in the Presence of Rhodamine 6G as Fluorescent Adsorption Indicator	145
<i>Experiment 79.</i> Titration by Mohr's Method	146
References	146

Chapter VII. Colloidal Systems 148

Preparation of Colloidal Systems	150
<i>Experiment 80.</i> Preparation of the Sulphur Sol from Its Saturated Ethanol Solution	150
<i>Experiment 81.</i> Preparation of the Sulphur Sol from Sodium Thiosulphate	150
<i>Experiment 82.</i> Preparation of the Gel of Silicic Acid	151
<i>Experiment 83.</i> Preparation of the Sol of Ferric Hydroxide	152
<i>Experiment 84.</i> Preparation of the Sol of Arsenous Sulphide	152
<i>Experiment 85.</i> Preparation of the Gold Sol	152
<i>Experiment 86.</i> Preparation of the Gel of Calcium Carbonate	153
Properties of Colloidal Systems	154
Size and Charge of Colloidal Particles	154
<i>Experiment 87.</i> Tyndall Effect	154
<i>Experiment 88.</i> Charge of Colloidal Particles	155
<i>Experiment 89.</i> Repeptization of a Cobalt Sulphide Precipitate on Washing	156
Stability of Colloidal Systems	157
<i>Experiment 90.</i> Coagulation of the Colloidal System of Ferric Hydroxide	157
<i>Experiment 91.</i> Stabilization of the Colloidal System of Antimony Sulphide by Gelatin	158
Adsorption	158
<i>Experiment 92.</i> Flotation of the Complex Compound of Aluminium with Aluminon	159
<i>Experiment 93.</i> Wettability of the Surface of Different Substances	160
Utilization of Colloid Formation in Chemical Analysis	161
<i>Experiment 94.</i> Detection of Antimony (V) with Rhodamine B	161
References	162

Chapter VIII. Oxidation-Reduction Reactions	163
Direction of Oxidation-Reduction Reactions	163
Direction of Reactions in Conformity with the Values of Standard Potentials of Oxidizing and Reducing Agents . .	165
<i>Experiment 95.</i> Oxidation-Reduction Properties of the Nitrite Ion	165
Effect of the Hydrogen Ion Concentration on the Oxidation- Reduction Potential	167
<i>Experiment 96.</i> Reaction Between Nitrite and Iodide Ions . .	167
<i>Experiment 97.</i> Reaction of Iodine with Arsenous Acid . . .	168
Change in the Oxidation-Reduction Potential by Complex Formation	169
<i>Experiment 98.</i> Change in the Potential of the Cobaltic-Cobal- tous System in the Presence of Ammonia	169
<i>Experiment 99.</i> Change in the Potential of the Ferric-Ferrous System in the Presence of Fluoride Ions (Reaction of Iodide Ion Oxidation)	170
<i>Experiment 100.</i> Change in the Potential of the Ferric-Ferrous System in the Presence of Fluoride Ions (Reaction of Silver Ion Reduction)	171
<i>Experiment 101.</i> Change in the Potential of the Molybdenum (VI)-Molybdenum (V) System in the Presence of Phosphate Ions	172
<i>Experiment 102.</i> Change in the Potential of the Cupric-Cup- rous System in the Presence of EDTA	172
Stepwise Oxidation-Reduction Reactions	173
<i>Experiment 103.</i> Reduction of Vanadate	174
<i>Experiment 104.</i> Oxidation of Vanadium (II)	174
Masking by Changing the Degree of Oxidation of Elements . . .	175
<i>Experiment 105.</i> Masking Iron (III) by Changing the Degree of Its Oxidation	175
Oxidation-Reduction Indicators	176
<i>Experiment 106.</i> Titration of Iron (II) by Cerium (IV) in the Presence of Diphenylamine	177
<i>Experiment 107.</i> Titration of Iron (II) by Cerium (IV) in the Presence of 1,10-Phenanthroline	178
<i>Experiment 108.</i> Effect of Temperature in Iodometric Titration in the Presence of Starch as Indicator	179
<i>Experiment 109.</i> Titration of Arsenite by Hydrogen Peroxide in the Presence of a Chemiluminescent Indicator	180
<i>Experiment 110.</i> Titration of Iron (II) by Potassium Permanganate in the Presence of Rhodamine B as Fluorescent Indicator	181
Reaction Rate and Catalytic Processes in Oxidation-Reduction Reactions	182
Effect of Ion Concentration on the Reaction Rate	183
<i>Experiment 111.</i> Dependence of the Induction Period on Reactant Concentration (Landolt's Reaction)	183
<i>Experiment 112.</i> Interaction Between Persulphate and Iodide Ions	184

<i>Experiment 113.</i> Destruction of Thiosulphate Ions in an Acid Medium	185
Catalytic and Induced Reactions	186
<i>Experiment 114.</i> Reaction of Thiosulphate Ion Oxidation by Hydrogen Peroxide in the Presence of Molybdate	187
<i>Experiment 115.</i> Autocatalytic Oxidation of Oxalic Acid by Potassium Permanganate	188
<i>Experiment 116.</i> Conjugate Reaction of Chloride Ion Oxidation by Permanganate Ions in the Presence of Ferrous Ions	189
<i>Experiment 117.</i> Reaction of Arsenous Ion Oxidation by Ceric Ions in the Presence of Iodide Ions	191
<i>Experiment 118.</i> Reaction of Thiosulphate Ion Oxidation by Ferric Ions	192
<i>Experiment 119.</i> Reaction of Hypophosphite Ion Oxidation by Iodine in the Presence of Thiosulphate Ions	193
Photochemical Oxidation-Reduction	193
<i>Experiment 120.</i> Reduction of Methylene Blue by Ferrous Ions under the Action of Ultraviolet Radiation	194
References	194

Chapter IX. Complexes in Chemical Analysis 196

Effect of the Structure of Metal Ion and Ligand on the Colour of Complexes	199
<i>Experiment 121.</i> Colour of Aquo Complexes of Metals	199
<i>Experiment 122.</i> Colour of Some Cobalt Complexes	200
Dissociation and Formation of Complexes	201
<i>Experiment 123.</i> Stepwise Dissociation of Bromide Complexes of Copper (II)	202
Factors Affecting the Stability of Complexes	203
<i>Experiment 124.</i> Comparative Stability of Chloride Complexes of Zinc and Cobalt	205
<i>Experiment 125.</i> Comparative Stability of the Thiocyanate and Fluoride Complexes of Iron	206
<i>Experiment 126.</i> Effect of Outer-Sphere Anion on the Stability of the Copper-Benzidine Complex	206
<i>Experiment 127.</i> Comparative Stability of the Benzidine and Tolidine Complexes of Copper	207
Inert and Labile Complexes	208
<i>Experiment 128.</i> Comparative Kinetic Stability of the Aquo Complexes of Iron (III) and Chromium (III)	209
Mixed Complexes	209
<i>Experiment 129.</i> Complex of Copper (II) with Pyridine and Salicylate Ions	210
<i>Experiment 130.</i> Binuclear Compound of Scandium and Yttrium with Lumogallion	210
Stabilization of Unstable Degrees of Oxidation of Elements by Complex Formation	211
<i>Experiment 131.</i> Stabilization of the Manganic Ion by Complex Formation	212

<i>Experiment 132.</i> Reaction of Oxidation of the Complex of Cobalt with EDTA	213
Increase in the Ionization Constant of a Weak Electrolyte as a Result of Complex Formation	213
<i>Experiment 133.</i> Reaction Between Boric Acid and Polyatomic Alcohols	213
Masking and Demasking	215
<i>Experiment 134.</i> Masking of the Ferric Ion by Fluoride Ions in Detecting the Cobaltous Ion	215
<i>Experiment 135.</i> Masking and Demasking of the Titanium Ion	216
<i>Experiment 136.</i> Masking and Demasking of the Ferric Ion	217
Effect of Temperature on Complex Formation	218
<i>Experiment 137.</i> Reaction Between the Ferric Ion and Sulphosalicylic Acid on Heating	218
<i>Experiment 138.</i> Reaction Between the Phosphate Ion and Molybdate Ion on Heating	218
Precipitation of Complexes	219
<i>Experiment 139.</i> Precipitation of the Iodide Bismuth Complex by Cinchonine	219
<i>Experiment 140.</i> Reaction Between the Zinc Thiocyanate Complex with Methyl Violet	220
Solvent Extraction of Metal Complexes	221
<i>Experiment 141.</i> Extraction of Iron (III) Complexes from Hydrohalic Acid Solutions	222
Complexones in Chemical Analysis	223
Utilization of EDTA for Ion Detection	225
<i>Experiment 142.</i> Coloured Complexes of Metals with EDTA	225
Masking with EDTA	226
<i>Experiment 143.</i> Masking of Zinc Ions with EDTA	226
Chelatometric Titrations	228
<i>Experiment 144.</i> Titration of the Copper Ion in the Presence of 1-(2-Pyridyl-Azo)-Naphthol-2 (PAN) as Indicator	228
<i>Experiment 145.</i> Titration of the Copper Ion in the Presence of Luminol as Luminescent Indicator	229
<i>Experiment 146.</i> Titration of the Barium Ion in the Presence of Fluorexone as Metallofluorescent Indicator	230
References	231
 Chapter X. Organic Reagents	 233
Functional Analytical Groupings, Dentation of Ligands and the Chelate Effect	234
<i>Experiment 147.</i> Reaction of the Thorium Ion with Arsenazo I and Arsenazo III	242
<i>Experiment 148.</i> Reaction Between the Titanium Ion and Hydroxyderivatives of Benzene	243
<i>Experiment 149.</i> Reaction Between the Ferrous Ion and Heterocyclic Bases	244
Steric Effects	245
<i>Experiment 150.</i> Effect of the Steric Structure of Benzoyl Monoxime on the Formation of the Complex with a Ferrous Ion	247

<i>Experiment 151.</i> Formation of Complexes of Iron (II) and Copper (I) with Phenanthroline Derivatives	248
<i>Experiment 152.</i> Formation of Complexes of Aluminium with 8-Hydroxyquinoline Derivatives	249
Effect of Ligand Basicity on the Stability of Complexes	250
<i>Experiment 153.</i> Reaction of the Copper Ion with 8-Hydroxyquinoline and 5,7-Dibromo-8-hydroxyquinoline	251
Effect of the Solvent Nature on the Colour of Metal Chelates	251
<i>Experiment 154.</i> Colour of Nickel 2,4-Dinitrobenzene-(1-Azo-5)-8-Hydroxyquinolate in Various Solvents	252
Selectivity of Organic Reagents	253
Characteristic Functional Analytical Groupings	254
<i>Experiment 155.</i> Reaction of the Tellurium Ion with Bismuthol Derivatives	254
<i>Experiment 156.</i> Complex Formation Between the Borate Ion and Quinalizarin	255
<i>Experiment 157.</i> Reaction of the Antimonous Ion with 1-(2-Pyridylazo)-Naphthol	256
Specific Reactions Based on the Synthesis of Organic Reagents	257
<i>Experiment 158.</i> Specific Reaction of the Nitrite Ion Based on the Synthesis of an Azo Compound (Griess' Reaction)	257
<i>Experiment 159.</i> Detection of Hydrogen Sulphide by the Formation of Methylene Blue	259
<i>Experiment 160.</i> Detection of the Ammonium Ion by the Reaction of Dye Formation	260
Effect of pH on the Selectivity of Reagents	260
<i>Experiment 161.</i> Reaction of Palladium and Nickel Ions with Dimethylglyoxime at Different pH Values	262
<i>Experiment 162.</i> Reaction Between Tiron and the Ferric Ion	263
Application of the Reactions of Oxidation-Reduction of Organic Reagents to Ion Detection	264
<i>Experiment 163.</i> Detection of the Stannous Ion by Cacotheline	264
Extraction of Complexes with Organic Reagents	265
<i>Experiment 164.</i> Extraction of Nickel and Cobalt Dimethylglyoximates	266
<i>Experiment 165.</i> Extraction of Cobalt 8-Hydroxyquinolate	267
<i>Experiment 166.</i> Extraction of the Ion Associate of the Thiocyanate Complex of Vanadium and the Pyridinium Ion	268
<i>Experiment 167.</i> Extraction of the Permanganate Ion in the Form of Its Tetraphenyl Arsonium Salt	268
<i>Experiment 168.</i> Extraction of the Ion Associate of the Chloride Complex of Antimony with Rhodamine B	269
Volatility of Metal Chelates	269
<i>Experiment 169.</i> Sublimation of Nickel Dimethylglyoximate	270
References	271
Chapter XI. Preparation of a Substance for Analysis	273
Sampling	273
<i>Experiment 170.</i> Sampling of Sand by Quartering	274
Phase Analysis	275

<i>Experiment 171.</i> Separation of Magnetite by an Ordinary Magnet	275
<i>Experiment 172.</i> Separation of Minerals According to Specific Weight by a Heavy Liquid	276
References	277
 Chapter XII. Methods of Separation of Elements	278
Precipitation and Coprecipitation as a Method of Separating and Concentrating Elements	278
Properties of Metal Sulphides	281
<i>Experiment 173.</i> Sulphide Modifications	281
<i>Experiment 174.</i> Precipitation of Cobalt Sulphides and Nickel Sulphides in the Presence of Pyridine	283
Precipitation and Dissolution of Metal Sulphides	284
<i>Experiment 175.</i> Separation of Copper and Cadmium in the Form of Their Sulphides in the Presence of Thiourea	285
<i>Experiment 176.</i> Prevention of the Formation of Stannic Sulphide in the Presence of Fluoride Ions	285
<i>Experiment 177.</i> Prevention of the Formation of Mercury Sulphide	286
<i>Experiment 178.</i> Dissolution of Lead Sulphide in the Presence of Hydrogen Peroxide	287
<i>Experiment 179.</i> Dissolution of Copper Sulphide in an Ammonia Medium in the Presence of Hydrogen Peroxide	287
Chromatographic Methods of Separation	288
Ion Exchange Chromatography	288
<i>Experiment 180.</i> Separation of Iron and Aluminium Ions by Ion Exchange	291
Partition Chromatography	291
<i>Experiment 181.</i> Separation of the Ions of Copper, Bismuth and Cadmium by Paper Chromatography	292
Precipitation Chromatography	293
<i>Experiment 182.</i> Separation of the Ions of Silver, Mercury and Lead	294
Solvent Extraction Methods of Separation	294
References	295
 Chapter XIII. Mendeleyev's Periodic Law and Analytical Chemistry	297
<i>Experiment 183.</i> Similarity and Difference in the Properties of Ions of Magnesium, Scandium and Zirconium on Interaction with the Phosphate Ion	302
<i>Experiment 184.</i> Comparison of the Action of Arsenazo III on the Ions of Magnesium, Aluminium, Zirconium and Thorium	303
<i>Experiment 185.</i> Interaction of Molybdenum (V) and Niobium (V) with the Thiocyanate Ion	304
References	306

PREFACE

The demonstrative experiment is part and parcel of a modern lecture on chemistry. The success of a lecture depends to a certain extent on the correct selection and timely conduction of an experiment or on a demonstration of slides and tables. This textbook is the first attempt of its kind in generalizing the experience gained in the demonstrative experiment at lectures on analytical chemistry. It is based on the experience of the department of analytical chemistry of the Lomonosov Moscow State University. Moreover, demonstrations found in the textbooks of general chemistry that conform to the specificity of analytical chemistry are used.

Attention is mainly devoted to the correctness and expediency of selecting an experiment and to its place in the general layout of a lecture, since the purpose of an experiment is to make the material being studied more convincing. The authors have classified the experiments according to the principal sections of the theory of analytical chemistry adopted in the programme for universities. Recommendations concerning the make-up of introductory lectures on qualitative and quantitative analysis have been separated into special chapters. The description of experiments is preceded by a brief general part dealing with the essence of an experiment and the chemism of the phenomena being observed. Due to the diversity of the questions dealt with in the book, the material is expounded somewhat schematically in some cases.

The textbook has ample table material, which may be used for preparing slides. The values of stability constants of complex compounds and the values of solubility products have been taken from the handbook by L. G. Sillescu

and A. E. Martell, *Stability Constants of Metal-Ion Complexes*, the Chemical Society, V. 1. London, Burlington House, 1964. Supplement No. 1, 1971.

Attention is particularly devoted to the equipment of the auditorium where lectures on chemistry are read, and advice is given on the make-up of a lecture. Due to technical difficulties, it is possibly not everywhere that some recommendation may be fulfilled. The textbook gives a considerably greater number of experiments than the lecture time allows, and the lecturer has a choice.

The authors express their gratitude to the workers of the department of analytical chemistry of the Moscow State University Prof. V. M. Peshkova, D. Sc. (Chem.), and Prof. P. K. Agasyan, D. Sc. (Chem.), for the valuable advice which they gave on reading the manuscript. We would also be grateful to all readers for their remarks, suggestions and addenda concerning the conduction of a chemical experiment at lectures on analytical chemistry.

Authors