

# Contents

Contributors v  
Dedication vii  
Preface ix

1. <b>Water Quality</b> <i>J. A. Borchardt and Graham Walton</i>	1
2. <b>Aeration</b> <i>G. R. Scott</i>	52
3. <b>Coagulation and Flocculation</b> <i>Jesse M. Cohen and Sidney A. Hannah</i>	66
4. <b>Mixing and Sedimentation Basins</b> <i>revised from the second edition by Robert S. Gemmell</i>	123
5. <b>Chlorination and Other Disinfection Processes</b> <i>Edmund J. Laubusch</i>	160
6. <b>Taste and Odor Control</b> <i>A. A. Rosen and R. L. Booth</i>	227
7a. <b>Filtration</b> <i>John R. Baylis, Oscar Gullans, and H. E. Hudson, Jr.</i>	245
7b. <b>Diatomite Filtration of Potable Water</b> <i>E. Robert Baumann</i>	282
8. <b>Corrosion Phenomena—Causes and Cures</b> <i>T. E. Larson</i>	297
9. <b>Chemistry of the Lime-Soda Process</b> <i>John F. Dye and J. L. Tuepker</i>	315
10. <b>Ion-Exchange Softening</b> <i>Eugene Bowers</i>	343

xii Contents

- |   |   |     |
|---|---|-----|
| 11. Iron and Manganese  | <i>John T. O'Connor</i>                                 | 380 |
| 12. Fluorides in Water  | <i>F. J. Maier</i>                                      | 397 |
| 13. Radioactivity   | <i>Conrad P. Straub</i>                                 | 441 |
| 14. Treatment Plant Control                                       | <i>M. E. Flentje</i>                                    | 463 |
| 15. Quality Control in Distribution Systems                       | <i>H. J. Ongerth</i>                                    | 478 |
| 16. Treatment of Water for Cooling, Heating, and Steam Generation | <i>Sidney Sussman</i>                                   | 499 |
| 17. Chemicals and Chemical Handling                               | <i>J. C. Vaughn, G. J. Turre, and B. L. Grimes, Jr.</i> | 526 |
| 18. Saline Water Conversion                                       | <i>William E. Katz and Rolf Eliassen</i>                | 587 |
| 19. Management of Water-treatment Plant Residues                  | <i>John T. O'Connor</i>                                 | 625 |
| Index   |   | 647 |