

Contents

For the detailed contents of any section, consult the title page of that section. See also the alphabetical index in the back of the handbook.

| | Section |
|---|----------------|
| Conversion Factors and Mathematical Symbols <i>James O. Maloney</i> | 1 |
| Physical and Chemical Data <i>Peter E. Liley, George H. Thomson, D. G. Friend, Thomas E. Daubert, Evan Buck</i> | 2 |
| Mathematics <i>Bruce A. Finlayson, James F. Davis, Arthur W. Westerberg, Yoshiyuki Yamashita</i> | 3 |
| Thermodynamics <i>Hendrick C. Van Ness, Michael M. Abbott</i> | 4 |
| Heat and Mass Transfer <i>James G. Knudsen, Hoyt C. Hottel, Adel F. Sarofim, Phillip C. Wankat, Kent S. Knaebel</i> | 5 |
| Fluid and Particle Dynamics <i>James N. Tilton</i> | 6 |
| Reaction Kinetics <i>Stanley M. Walas</i> | 7 |
| Process Control <i>Thomas F. Edgar, Cecil L. Smith, F. Greg Shinskey, George W. Gassman, Paul J. Schafbuch, Thomas J. McAvoy, Dale E. Seborg</i> | 8 |
| Process Economics <i>F. A. Holland, J. K. Wilkinson</i> | 9 |
| Transport and Storage of Fluids <i>Meherwan P. Boyce</i> | 10 |
| Heat-Transfer Equipment <i>Richard L. Shilling, Kenneth J. Bell, Patrick M. Bernhagen, Thomas M. Flynn, Victor M. Goldschmidt, Predrag S. Hrnjak, F. C. Standiford, Klaus D. Timmerhaus</i> | 11 |
| Psychrometry, Evaporative Cooling, and Solids Drying <i>Charles G. Moyers, Glenn W. Baldwin</i> | 12 |
| Distillation <i>J. D. Seader, Jeffrey J. Siirola, Scott D. Barnicki</i> | 13 |

| | | |
|---|---|----|
| Gas Absorption and Gas-Liquid System Design | <i>James R. Fair, D. E. Steinhmeyer, W. R. Penny, B. B. Crocker</i> | 14 |
| Liquid-Liquid Extraction Operations and Equipment | <i>Lanny A. Robbins, Roger W. Cusack</i> | 15 |
| Adsorption and Ion Exchange | <i>M. Douglas LeVan, Giorgio Carta, Carmen M. Yon</i> | 16 |
| Gas-Solid Operations and Equipment | <i>Mel Pell, James B. Dunson</i> | 17 |
| Liquid-Solid Operations and Equipment | <i>Donald A. Dahlstrom, Richard C. Bennett, Robert G. Emmet, Peter Harriott, Tim Laros, Wallace Leung, Shelby A. Miller, Brooker Morey, James Y. Oldshue, George Priday, Charles E. Silverblatt, J. Stephen Slottee, Julian C. Smith</i> | 18 |
| Solid-Solid Operations and Equipment | <i>Kalanadh V. S. Sastry, Harrison Cooper, Richard Hogg, T. L. P. Jespen, Frank Knoll, Bhupendra Parekh, Raj K. Rajamani, Thomas Sorenson, Ionel Wechsler, Chad McCleary, David B. Todd</i> | 19 |
| Size Reduction and Size Enlargement | <i>Richard L. Snow, Terry Allen, Bryan J. Ennis, James D. Litster</i> | 20 |
| Handling of Bulk Solids and Packaging of Solids and Liquids | <i>Grantges J. Raymus</i> | 21 |
| Alternative Separation Processes | <i>Joseph D. Henry, Jr., Michael E. Prudich, William Eykamp, T. Alan Hatton, Keith P. Johnston, Richard M. Lemert, Robert Lemlich, Charles G. Moyers, John Newman, Herbert A. Pohl, Kent Pollock, Michael P. Thien</i> | 22 |
| Chemical Reactors | <i>Stanley M. Walas</i> | 23 |
| Biochemical Engineering | <i>Henry R. Bungay, Arthur E. Humphrey, George T. Tsao</i> | 24 |
| Waste Management | <i>Louis Theodore, Anthony J. Buonicore, John D. McKenna, Irwin J. Kugelman, John S. Jeris, Joseph J. Santoleri, Thomas F. McGowan</i> | 25 |
| Process Safety | <i>Stanley M. Englund, Frank T. Bodurtha, Laurence G. Britton, Daniel A. Crowl, Stanley Grossel, W. G. High, Trevor A. Kletz, Robert W. Ormsby, John E. Owens, Carl A. Schiappa, Richard Siwek, Robert E. White, David Winegardner, John L. Woodward</i> | 26 |
| Energy Resources, Conversion, and Utilization | <i>Walter F. Podolski, Shelby A. Miller, David K. Schmalzer, Anthony G. Fonseca, Vincent Conrad, Douglas E. Lowenhaupt, John Bacha, Lawrence K. Rath, Hsue-peng Loh, Edgar B. Klunder, Howard G. McIlvried, III, Gary J. Stiegel, Rameshwar D. Srivastava, Peter J. Loftus, Charles E. Benson, John M. Wheeldon, Michael Krumpelt</i> | 27 |
| Materials of Construction | <i>Oliver W. Siebert, John G. Stoecker</i> | 28 |
| Process Machinery Drives | <i>Heinz P. Bloch, R. H. Daugherty, Fred K. Geitner, Meherwan P. Boyce, Judson S. Swearingen, Eric Jennet, Michael M. Calistrat</i> | 29 |
| Analysis of Plant Performance | <i>Colin S. Howat</i> | 30 |
| Index follows Section 30. | | |