

CHEMICAL ENGINEERING TEXTBOOKS

Prof. Konduru M. Rao
Departament of Chemical Engineering
State University of Maringa
Maringa, Parana, Brazil
1980-1982

Given below are the most important textbooks prescribed to chemical engineering students. The professor reads through, follows and teaches the contents of one or two textbooks for each discipline, but there are several other related textbooks available on each topic. However, in order to gain a full command and thorough understanding of any discipline, the professor must refer to and master the contents of several other textbooks for each discipline. The students also must refer to and gain a clear concept on the contents of various textbooks, available in the university libraries, for each discipline if he/she wants to score A Plus or A grades.

- I, Prof. Konduru M. Rao, have read through and mastered the contents of the following textbooks and many other textbooks. Whenever I gave a lecture, I memorized the whole lecture and wrote down the complex mathematical equations on the backboard without ever consulting the pre-written notes in hand. My students always loved my lectures, and talked about me highly. Teaching chemical engineering courses was the most important accomplishment of my entire life.
- 1. Warren McCabe, Julian Smith, and Peter Harriott, Unit Operations of Chemical Engineering, McGraw Hill Chemical Engineering Series, Hardcover.
- 2. Alan S. Foust et al, Principles of Unit Operations, 1960, John Wiley & Sons.
- 3. J. M. Coulson, J. F. Richardson, Chemical Engineering, There are Three Volumes, Vol. 2: Unit Operations Hardcover, Pergamon Press; 3rd edition, June 1978.
- 4a. Coughanowr D.R. and Koppel L.B, Process Systems Analysis and Control, McGraw Hill Publishing Co., 1965.
- 4b. Donald Coughanowr and Steven LeBlanc, Process Systems Analysis and Control, Aug 18, 2011.
- 5. George Stephanopoulos, Chemical Process Control: An Introduction to Theory and Practice Paperback, PTR Prentice Hall, 1984.
- 6. H. C. Van Ness, and J. M. Smith, Introduction to Chemical Engineering Thermodynamics, McGraw Hill Publishing Co., Hardcover.
- 7. K Denbigh, The Thermodynamics of the Steady State Hardcover Import, 1951
- 8. J. M. Smith, H. C. Van Ness, M. M. Abbott, Introduction to Chemical Engineering Thermodynamics, 7th Edition Paperback, McGraw Hill Publishing Co., February 1, 2005.
- 9. J. M. Smith, Chemical Engineering Kinetics, 3rd Edition, McGraw Hill Publishing Co.,
- 10. Octave Levenspiel, Chemical Reaction Engineering, 2nd Edition (1972), 3rd Edition (1998), Hard Cover, Wiley or John Wiley & Sons.

- 11. James Welty, Charles E. Wicks, Robert E. Wilson, Fundamentals of Momentum, Heat, and Mass Transfer Hardcover, Wiley, 4th Edition, 1976, and November 2, 2000.
- 12. C. O. and J. E. Myers Bennett, Momentum, Heat, and Mass Transfer Hardcover Import, 1962
- 13. Robert E. Treybal, Mass Transfer Operations Hardcover February 1, 1968, and January 1, 1980.
- 14. R. Byron Bird, Warren E. Stewart, Edwin N. Lightfoot, Transport Phenomena, First Edition, 1960, John Wiley & Sons.
- 15. R. Byron Bird, Warren E. Stewart, and Edwin N. Lightfoot Transport Phenomena, Revised 2nd Edition Hardcover, December 11, 2006, John Wiley & Sons,
- 16. David M. Himmelblau and James B. Riggs, Basic Principles and Calculations in Chemical Engineering (8th Edition), Also called STOICHIOMETRY, Prentice Hall International Series in the Physical and Chemical Engineering Sciences, Hardcover – June 10, 2012.
- 17. Ed. P. H. Groggins, Unit Processes in Organic Synthesis Chemical Engineering Series Hardcover 1938
- 18. Charles Donald Holland, Multicomponent distillation (Prentice-Hall international series in the physical and chemical engineering sciences) Hardcover, Prentice Hall, Third Printing, 1963.
- 19. Charles Donald Holland, Computer Methods for Solving Dynamic Separation Problems, Mcgraw Hill Chemical Engineering Series, Hardcover February, 1983.
- 20. Bufford D. Smith et al, Design of Equilibrium Stage Processes, Hardcover, McGraw Hill Book Co., First Edition, 1963.
- 21. Fred W. Billmeyer Jr., Textbook of Polymer Science, John Wiley & Sons, Mar 21, 1984.
- 22a. Mickley, Sherwood and Reed, Applied Mathematics in Chemical Engineering. 22b. Harold S. MICKLEY, Thomas Kilgore SHERWOOD and Charles Eli REED, Applied Mathematics in Chemical Engineering, Second Edition, McGraw-Hill Book Company, 413 pages, 1957.
- 23. Robert Perry, PERRY'S Chemical Engineers' Handbook, McGraw Hill Publishing Co.
- 24. Lloyd E. Brownell and Edwin H. Young, Process Equipment Design: Vessel Design Paperback Wiley InterScience, 420 pages, Jan 15 1959
- 25. Harvey JF, Theory and Design of Modern Pressure Vessels, 2nd Edition, Van Nostrand Reinhold Co., 1974.
- 26. Dennis R. Moss and Michael M. Basic, Pressure Vessel Design Manual Hardcover, 832 pages, Butterworth-Heinemann, 4th edition, Dec 26 2012.
- 27. Eugene F. Megyesy, Foreword by Paul Buthod, Pressure Vessel Handbook Hardcover Nov 2008.

Autobiography of Rao Konduru www.mydiabetescontrol.com/Bio/