

Books

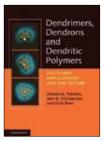
CHEMICAL REACTOR ANALYSIS AND APPLICATIONS FOR THE PRACTICING ENGINEER



Louis Theodore, John Wiley & Sons, Hoboken, NJ, \$125, 592 pages, Aug. 2012, ISBN: 978-0-470915-35-6 This entry in Wiley's Series of Essential Engineering Calculations will help chemical engineers to design and analyze reactors that work at maximum efficiency, produce the highest yield of product, and have the lowest cost.

Addressing both technical and calculational problems, the book covers operation, maintenance, and inspection methods, as well as procedures to purchase a reactor. More than 300 examples are included, ranging from simple equations to detailed design analysis. A dedicated website features additional problems and practice exams. The book also reviews Accreditation Board for Engineering and Technology (ABET) topics as they apply to chemical reactors, making it beneficial for engineers who are preparing to take the Professional Engineer (PE) exam.

DENDRIMERS, DENDRONS, AND DENDRITIC POLYMERS: DISCOVERY, APPLICATIONS, AND THE FUTURE



Donald A. Tomalia, Jørn B. Christensen, and Ulrik Boas, Cambridge Univ. Press, New York, NY, \$95, 420 pages, Nov. 2012, ISBN: 978-0-521515-80-1 Dendrimer science has entered mainstream polymer science. This book offers essential information for newcomers as well as those experienced in the field.

After an introduction to the discovery and development of the dendritic architecture as a macromolecular concept, readers will find an in-depth analysis of the field, including synthesis and characterization challenges, biopharmaceutical applications, toxicology, the dendritic effect, and the concept of dendrimers as quantized building blocks leading to a new nano-periodic system. The book concludes with future perspectives for dendrimers and dendrons.

This reference will be useful to researchers — including inorganic, organic, supramolecular, polymer, and physical chemists — as well as nanoscientists and medical practitioners.

