entropy to provide an intuitive basis for the second law postulate.

ENGINEERING THERMODYNAMICS

WILLIAM C. REYNOLDS, Stanford University and HENRY C. PERKINS, University of Arizona. 608 pages, $12.50

The first seven chapters of this book are identical to those in *Thermodynamics, Second Edition.* However, the remaining chapters emphasize applications to *actual* engineering systems. The material on power systems has been expanded, and chapters on compressible flow and heat transfer included. There are no detailed statistical thermodynamic calculations in this version, though the statistical concepts remain in the fundamental development of the first seven chapters and are used later in qualitative ways.

PRINCIPLES OF POLYMER SYSTEMS

FERDINAND RODRIGUEZ, Cornell University. 432 pages, $18.50.

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CHEMICAL ENGINEERING KINETICS, Second Edition

J. M. SMITH, University of California, Davis. 544 pages (tent.), $15.50 (tent.). Available Spring, 1970

With the general purpose of acquainting students with the tools necessary to design new chemical reactors and predict the performance of existing ones, this book develops principles of kinetics and reactor design and then applies them to actual chemical reactors. Emphasis is placed on real reactions using experimental rather than hypothetical data. Kinetics, homogeneous reactions, heterogeneous catalytic and non-catalytic reactors, and residence time distribution effects are treated in detail.

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THERMODYNAMICS, Second Edition

KENNETH WARK, JR., Purdue University. 832 pages (tent.), $16.50 (tent.)

The important change in this revision is that the concept of entropy and the second law of thermodynamics are now approached via separate and independent classical and statistical viewpoints. The major portion of the text is developed from a set of postulates and definitions based on a macroscopic outlook on matter. As a result, the instructor can teach the material using either a combined classical-statistical approach, or a purely macroscopic viewpoint.

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