



## Thermodynamics: Fundamentals and Applications for Chemical Engineers (Paperback)

By Miguel T Fleischer

Cognella Academic Publishing, 2017. Paperback. Condition: New. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.Thermodynamics: Fundamentals and Applications for Chemical Engineers explores the concepts and properties of thermodynamics and illustrates how they can be applied to solve practical problems. The book introduces the fundamentals of thermodynamics for multi-phase, multi-component systems, providing a framework for dealing with problems in chemical engineering including mixing, compressing, and distilling fluids. The first eight chapters of Thermodynamics focus on single-component thermodynamics, introducing important concepts that will be referenced throughout subsequent chapters. Later chapters introduce modeling for multi-component systems. Topics covered include: properties as a function of state variables; first and second law of thermodynamics; power cycles, combustion, refrigeration cycles, and heat pumps; equilibrium phase relationships; correlations and calculations of vapor-liquid equilibrium data; elementary theories of solutions; and the efficiency of multicomponent separation and reaction processes. The Second Law of Thermodynamics, availability concepts, and process efficiency receive extensive coverage. The clear, well-organized sequence of the chapters helps students successfully learn and retain information. Each of the fifteen chapters includes updated sample problems that underline key principles and problem-solving steps. The book has numerous appendixes for quick reference on everything from conversion factors to...



**READ ONLINE**  
[ 1.2 MB ]

### Reviews

*This pdf is indeed gripping and exciting. It is written in easy words and phrases and not confusing. Once you begin to read the book, it is extremely difficult to leave it before concluding.*

-- **Alayna Kuphal**

*Very helpful to all class of folks. Better than never, though I am quite late in starting reading this one. You can expect to like just how the blogger created this pdf.*

-- **Mandy Larson**