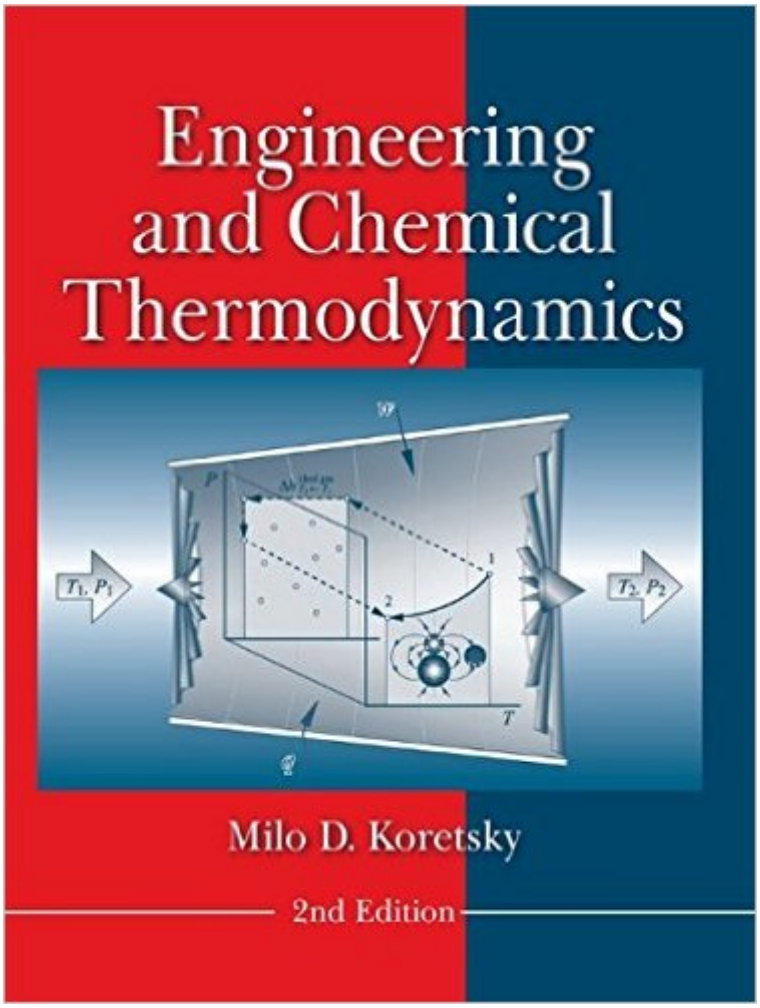
# Engineering And Chemical Thermodynamics



## Synopsis

Chemical engineers face the challenge of learning the difficult concept and application of entropy and the 2nd Law of Thermodynamics. By following a visual approach and offering qualitative discussions of the role of molecular interactions, Koretsky helps them understand and visualize thermodynamics. Highlighted examples show how the material is applied in the real world. Expanded coverage includes biological content and examples, the Equation of State approach for both liquid and vapor phases in VLE, and the practical side of the 2nd Law. Engineers will then be able to use this resource as the basis for more advanced concepts.

## Book Information

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## Customer Reviews

This text is good for exactly what it claims: the undergraduate. If you’re looking for a good general text on thermodynamics that you can use throughout your career (even as a graduate student), this is NOT it. But if you’re looking for an easy-to-approach and helpful book that spoon-feeds you the (admitedly difficult the first time) concepts of thermodynamics, this is the text for you. Koretsky himself is upfront about this in the preface. There are a lot of funny errors in this printing (look in the front cover to see that the units for gravitational acceleration are m^2/s and that a m^3 is only 10^-3 L. That would be a LOT of Coke). But hey, even BS&L (the hailed transport phenomena text of chemical engineering) is full of them (if you don’t believe me, check out the correngia on Bird’s website at U of W). The charts in the back are somewhat complicated to use, at least a lot more than my favorite textbook of all time, Felder and Rosseau’s Introduction to Chemical Engineering. In conclusion, good for the confused and undergraduate, of little value to the graduate and practicing.

I received my B.S. in chemical engineering (2005) at OSU and studied this text, in part, under Dr. Koretsky. The text was split into two undergraduate courses. I recently entered a PhD program at Texas A&M and reviewed almost the entire text in preparation for the qualifier. The text information was more than sufficient to pass the thermodynamics portion of the test at Texas A&M.In reviewing some of the other comments, I noticed that there is an indication that the primary problem is a lack of detail. I believe this text has more than enough detail for 99.9% of thermodynamics students. If you know the material in this text, you will have the required thermodynamics background for most graduate courses in chemical engineering. Additionally, you will be ahead of most other graduate students.I believe the text is excellent because it is clear and practical. It covers, what appears to me, to be the important topics in a clear way. It can be realistically reviewed in its entirety in two undergraduate courses, plus maybe a couple of self study weeks afterward. I reviewed nearly the entire book in about 1 month during the summer before starting graduate school.

I love this textbook. It is one of the best textbooks, if not the best, that I have ever owned, and does an excellent job of covering a very conceptually challenging subject. The writing style is clear and enjoyable to read. The chapters are well organized, so it is easy to find specific points, and there are frequent and helpful examples. This last point is especially important in an engineering textbook. With few exceptions, it covers every topic thoroughly, without skipping logical or mathematical steps. This book definitely contributed to how much I enjoyed my Thermodynamics course.I have no complaints.

This is a very nice book for undergraduate thernodynamics. I decided to use it for teaching this class for sophomores. The material es very well presented and developed, with lots of examples. The set of problems at the end of each chapter is also interesting. Definitely a good purchase.

This book is written very comprehensively. I would recommend it whether or not it is required if you are interested in the principles of thermodynamics.

Full disclosure. I read this book because Milo Koretsky taught me physics as an undergrad at UCSD way back in the early 1980’s. A friend of mine at Colorado School of Mines said that I could get through "Milo’s book" even though I didn’t have a lot of chemistry in high school and none in college. (I do a lot of financial analysis work in my profession - which helped me slug through it.) I liked the

books relaxed style and brilliant analysis. Although a bit advanced for me at times, the organization was cogent, each chapter built upon the basic concepts presented. It clearly referenced what the purpose of the chapter was and then reviewed that purpose at the end of each chapter. I could almost hear Professor Koretsky encouraging me as I read this book. A bit nerdy to read a book like this, even though I didn't have to, but burned a bunch of brain cells in the process - which is a good thing.

Great!

Liked everything about this product, no problems.



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