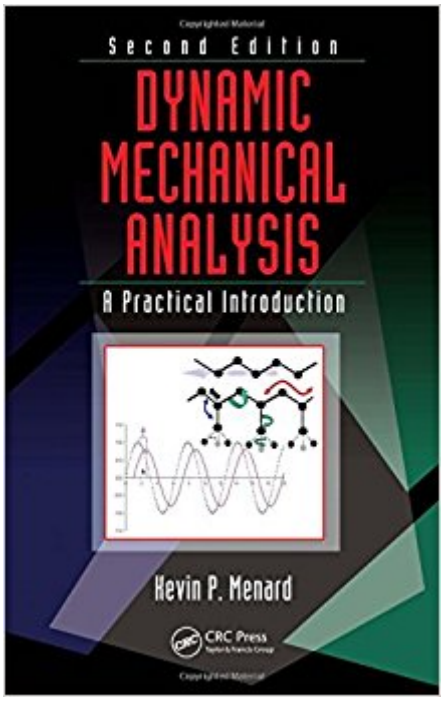
Dynamic Mechanical Analysis: A Practical Introduction, Second Edition



Synopsis

Dynamic mechanical analysis (DMA) has left the domain of the rheologist and has become a prevalent tool in the analytical laboratory. However, information on the use of this important tool is still scattered among a range of books and articles. Novices in the field have to dig through thermal analysis, rheology, and materials texts just to find the basics. Updated with new material, expanded practical explanations, and new applications, Dynamic Mechanical Analysis, Second Edition continues to give chemists, engineers, and materials scientists a starting point for applying DMA to their individual fields. It imparts a clear understanding of how DMA works, its advantages, and possible limitations. Additional topics include stress/strain, data handling, experimental technology, test methods, and data analysis. One of the only references dedicated to DMA, this accessible and easy-to-read guide gathers the most pertinent information available on this important technique.

Book Information

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Customer Reviews

The author of this book has taught many short courses on DMA and this shows in his book…This reviewer found the last chapter, on the section on the application of DMA to real problems to be very useful…This book should be quite useful to someone who is just beginning to do thermal methods and wants to include DMA among the methods used.-Charles A. Wilkie, Marquette University,Polymer News…it is also a practical book for engineers and scientists already working in industry. --This text refers to an out of print or unavailable edition of this title.

It explains the fundamentals of the test and the difference between the conventional tests and the

DMA. It contains various applications for different materials.

I ordered this book based on the other review here on.com and was looking for a bit more. A fair bit of the contentis already covered by free application notes on the web and sales literature that the makers of DMA instrumentation pass out for free. If your looking for a solid treatment of the polymer physics of DMA testing, that’s not this book; maybe it hasn’t been written yet. If you just want to relate DMA testing to real world environments and effects, then there aren’t enough good examples in the book or a method to make this book worth the price.This would make an acceptable guide for a technician who was just introduced to a DMA - I was looking for more.

I spent many hours researching for a Thermal Mechanical textbook that was packed full of "Get Down To The Point Answers". Let’s face it, there are not many current Thermal Analysis textbooks for sale. The books I’ve seen are too scrambled with no understanding at the end. This book was VERY informative, and it answered my questions. Special Thanks to the author. Please write many more books with the same intentions in mind: "We would like to understand and learn from what we read"! Thank You!

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This is a must own book for graduate students in polymer science and is also an excellent introduction to this important materials characterization technique for professionals new to this field. To my knowledge there is not presently another book which discusses this material without a significant excursion into complex variable maths.

I needed to get up to speed on DMA fast and I got what I needed. It didn’t provide all the info I required for my specific application (submicron thin films) but it did provide a sound foundation for further investigation. This is truly what it claims to be, a practical introduction, many thanks to the author.

The clear text will guide my experiment in composites.The DMA technique may be helpful on several materials dynamic-mechanical characterization and this book introduces the why and how to.Good investment to my thesis!

Is a nice, good for begginers, book for those just entering the world of DMA. Helps you understand the basic concepts, and walks you through practical understanding of thermodyanmic studies of polimers.

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