

# Thermochemical Reactions

*Numerical Solution*

**...just the color figures for those who got the B&W  
printed book...**

**D. James Benton**

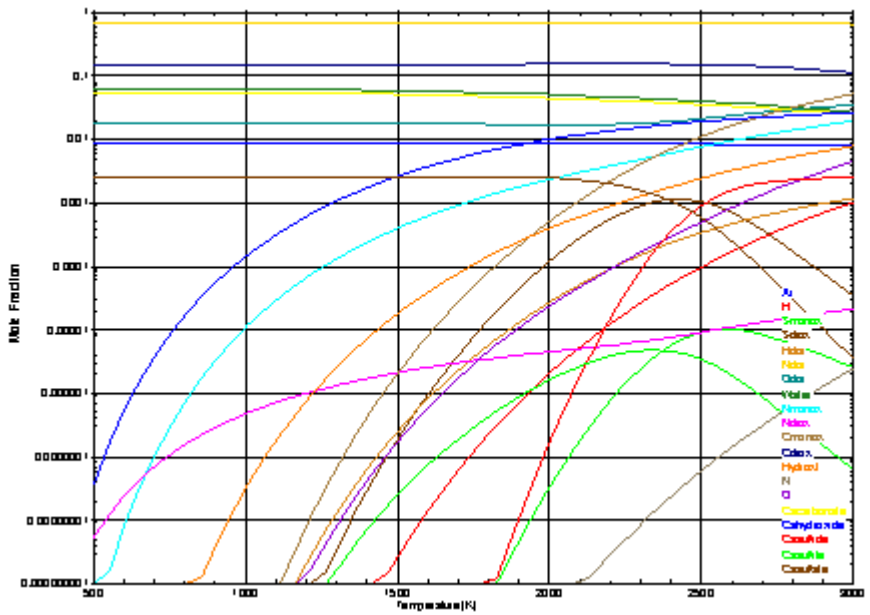
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## **Foreword**

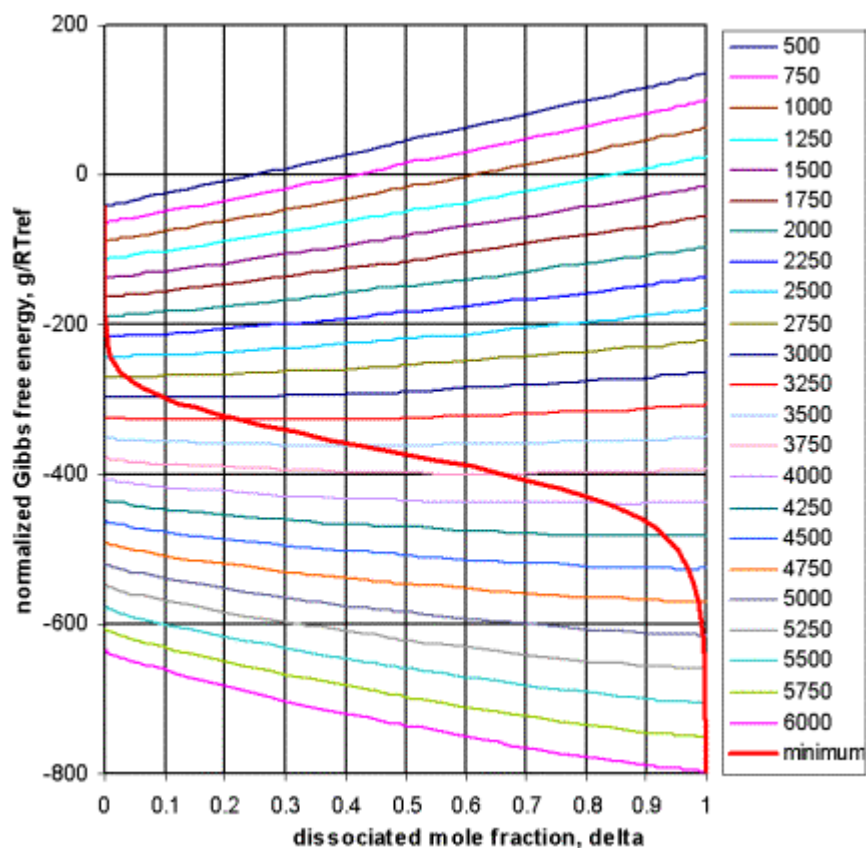
Thermochemistry is the science of analyzing molecular reactions to determine if they are spontaneous, energy absorbing or releasing, and to predict the product mole ratios and rates. Chemical reactions, like most other processes, tend to follow the path of free energy minimization or entropy maximization. This principle forms the mathematical basis for the analytical approach. This book is a how-to manual, filled with many examples and comes with all the code you need to accomplish this task.

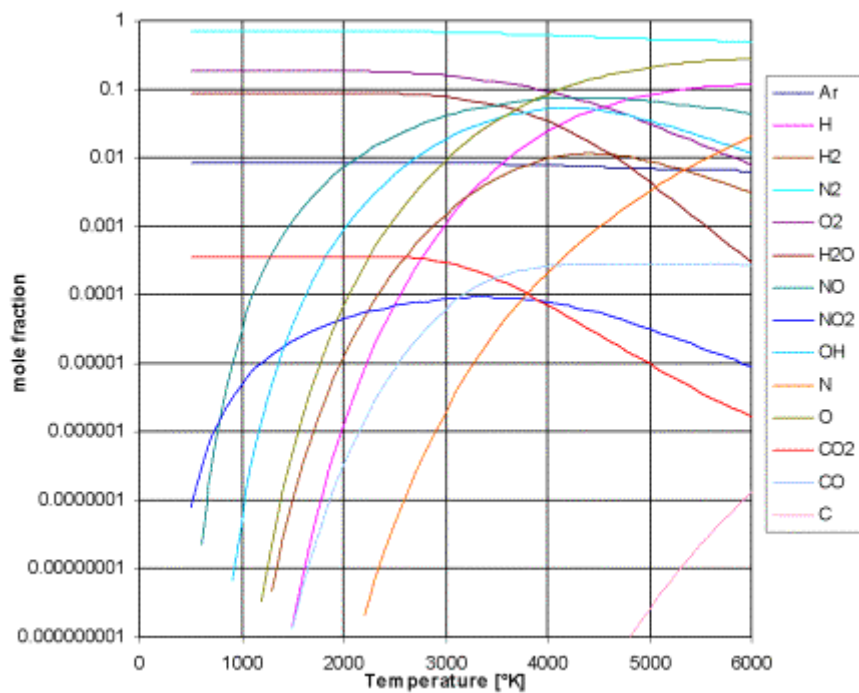




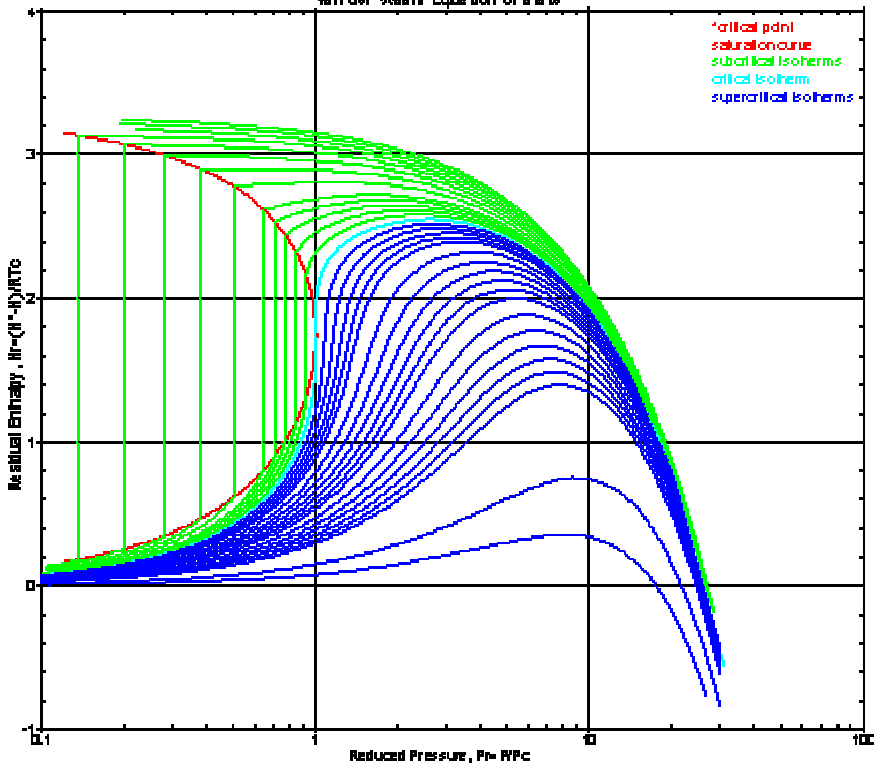


Combustion of Coal with Air and Limestone to Capture the Sulfur

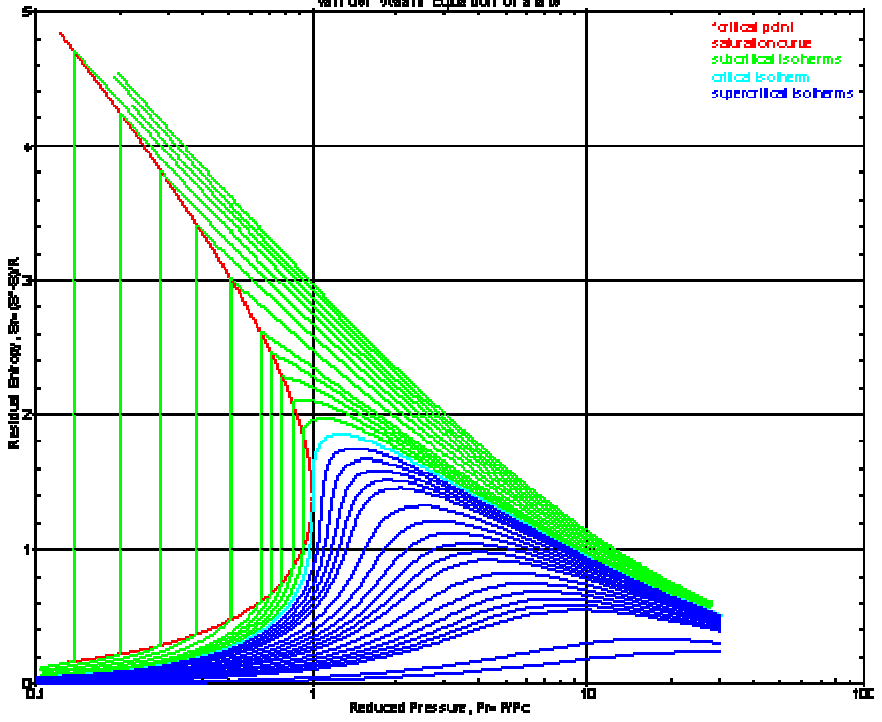




van der Waals Equation of State

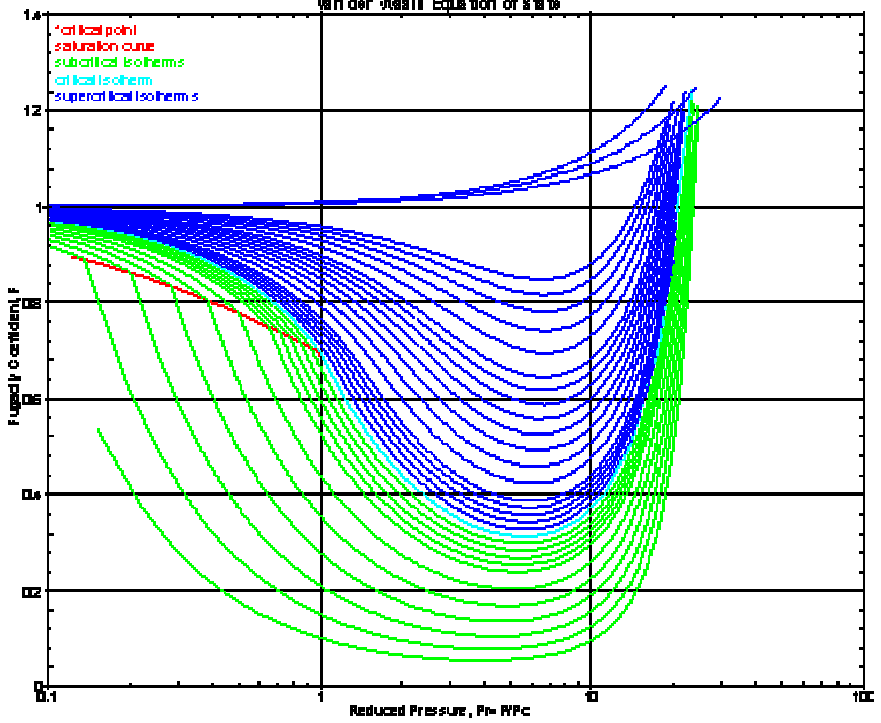


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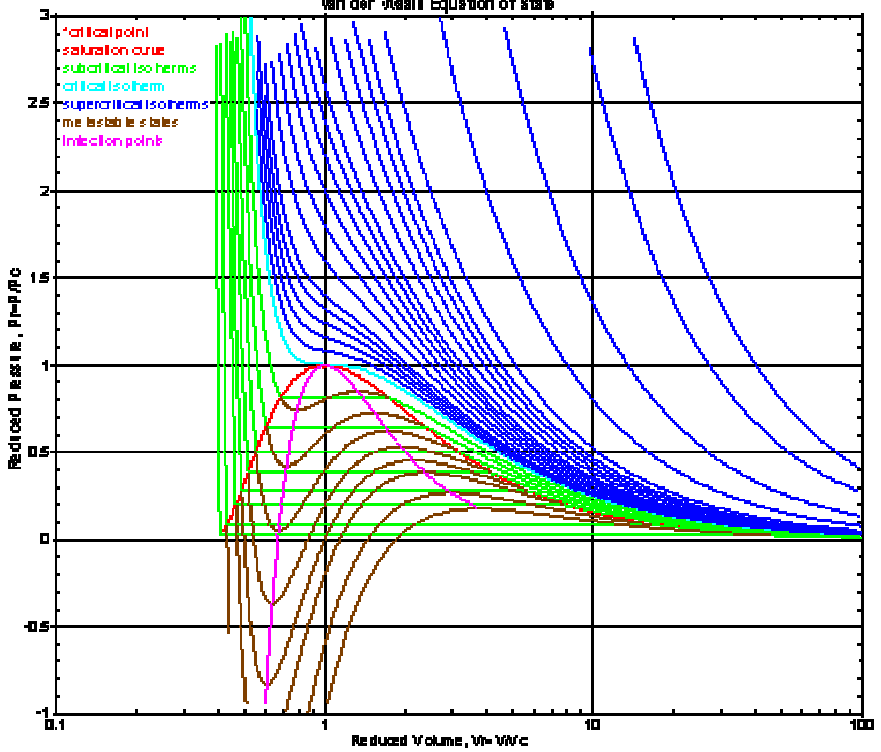




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