

CONTENTS

1. Mathematical procedures	1
2. Stoichiometric and composition relations	24
3. Behavior of ideal gases	46
4. Vapor pressures	72
5. Humidity and Saturation	110
6. Solubility and crystallization	134
7. Material balances	196
8. Thermophysics	237
9. Thermochemistry	293
10. Adsorption	368
11. Fuels and combustion	397
12. Chemical, metallurgical, and petroleum processes	452
13. Appendix	xv
14. Author index	xxiii
15. Subject index	xxv