
Contents

Foreword 1	vii
Foreword 2	ix
Preface	xi
Chapter 1. Basic Concepts of Thermodynamics	1
1.1. Exercises	1
1.2. Problems	6
1.3. Tests	10
1.4. Detailed corrections	12
Chapter 2. Closed Systems without Chemical Reactions	31
2.1. Exercises	31
2.2. Problems	43
2.3. Tests	60
2.4. Detailed corrections	65
Chapter 3. Open and Reacting Systems During Reaction	125
3.1. Exercises	125
3.2. Problems	135
3.3. Tests	147
3.4. Detailed corrections	149
Chapter 4. Mixtures or Solutions	191
4.1. Exercises	191
4.2. Problems	201

4.3. Tests	212
4.4. Detailed corrections	215
Appendix	269
Nomenclature	271
References	279
Index	281