

# Contents

<i>Preface</i>	iii
<i>Contributors</i>	vii
1. Natural Rubber and Recycled Materials <i>William Klingensmith and Brendan Rodgers</i>	
2. General-Purpose Elastomers <i>Howard Colvin</i>	51
3. Special-Purpose Elastomers <i>Sudhin Datta</i>	105
4. Butyl Rubbers <i>Walter H. Waddell and Andy H. Tsou</i>	133
5. Thermoplastic Elastomers: Fundamentals and Applications <i>Tonson Abraham and Colleen McMahan</i>	163
6. Carbon Black <i>Wesley A. Wampler, Thomas F. Carlson, and William R. Jones</i>	239

## Contents

- |   |     |
|---|-----|
| 7. Silica and Silanes   | 285 |
| <i>Walter Meon, Anke Blume, Hans-Detlef Luginsland,<br/>and Stefan Uhrlandt</i> |     |
| 8. General Compounding  | 365 |
| <i>Harry G. Moneypenny, Karl-Hans Menting,<br/>and F. Michael Gragg</i>         |     |
| 9. Resins   | 417 |
| <i>James E. Duddey</i>  |     |
| 10. Antioxidants and Other Protectant Systems                                   | 457 |
| <i>Sung W. Hong</i>   |     |
| 11. Vulcanization   | 505 |
| <i>Frederick Ignatz-Hoover and Byron H. To</i>                                  |     |
| 12. Compound Development and Applications                                       | 569 |
| <i>George Burrowes and Brendan Rodgers</i>                                      |     |
|   | 633 |