

CONTENTS

PART I PROPERTIES OF RUBBER

| | | |
|-----------|--|----|
| Chapter 1 | General properties and applications | 3 |
| Chapter 2 | Dynamic properties and structure breakdown of rubber | 24 |

PART II STRESS/STRAIN RELATIONSHIPS

| | | |
|-----------|--|-----|
| Chapter 3 | Large strain theory | 85 |
| Chapter 4 | Force/deformation relationship in rubber units | 109 |

PART III CURRENT DESIGN OF RUBBER SPRINGS AND COUPLING

| | | |
|-----------|--|-----|
| Chapter 5 | Rubber springs: Basic theory and practice of mounting arrangements | 147 |
| Chapter 6 | Rubber couplings | 194 |
| Chapter 7 | Practical design details | 222 |
| Chapter 8 | Transmissibility through and wave effects in rubber | 254 |

PART IV APPLICATIONS

| | | |
|------------|---|-----|
| Chapter 9 | Rubber in Packaging | 281 |
| Chapter 10 | Rubber in bearings for bridges | 322 |
| Chapter 11 | Rubber in piers and fenders | 337 |
| Chapter 12 | Rubber in buildings | 357 |
| Chapter 13 | Rubber in engine suspensions | 369 |
| Chapter 14 | Rubber in vehicle suspensions and body supports | 389 |
| Chapter 15 | Rubber in damping panels and structural members | 419 |
| Chapter 16 | Rubber in machinery and equipment | 451 |

APPENDIX

| | | |
|------------|--|-----|
| Appendix 1 | Properties of vulcanized natural and synthetic rubbers | 476 |
| Appendix 2 | Note on expressions for damping | 479 |
| Appendix 3 | Note on the decibel system | 480 |
| Appendix 4 | High temperature properties of elastomers | 481 |
| Appendix 5 | Hardness testing of rubbers | 484 |

| | | |
|-------|--|-----|
| INDEX | | 489 |
|-------|--|-----|