

Contents

| | |
|---|-----|
| 1 THE PHYSICAL TESTING OF PLASTICS. A PREAMBLE | 1 |
| 2 THE MANIPULATION OF EXPERIMENTAL RESULTS | 12 |
| 3 A GENERALISED APPROACH TO MECHANICAL TESTING | 24 |
| 4 DEFORMATION EXPERIMENTS. SINUSOIDAL EXCITATION FUNCTIONS | 57 |
| 5 DEFORMATION EXPERIMENTS. STEP EXCITATION FUNCTIONS | 74 |
| 6 SHORT-TERM STRENGTH TESTS. RAMP AND IMPULSE EXCITATIONS | 105 |
| 7 LONG-TERM STRENGTH TESTS. STEP AND SINUSOIDAL EXCITATIONS | 129 |
| 8 THE SAMPLE | 149 |
| APPENDICES | |
| A Probability Distributions | 159 |
| B Tests of Significance | 166 |
| C The Fitting of Curves | 171 |
| INDEX | 177 |