

Lessons

LESSON 1: INTRODUCTION — 1

LESSON 2: IDEAL CHAINS — 31

LESSON 3: GAUSSIAN COILS AND BOLTZMANN SPRINGS — 51

LESSON 4: REAL CHAINS — 71

LESSON 5: FLORY EXPONENT — 83

LESSON 6: CHAIN DYNAMICS — 96

LESSON 7: FLORY–HUGGINS THEORY — 111

LESSON 8: PHASE DIAGRAMS — 131

LESSON 9: OSMOTIC PRESSURE — 148

LESSON 10: RHEOLOGY — 159

LESSON 11: VISCOELASTICITY — 167

LESSON 12: PRACTICE AND THEORY OF RHEOLOGY — 180

LESSON 13: SUPERPOSITION PRINCIPLES — 198

LESSON 14: MECHANICAL SPECTRA — 209

LESSON 15: RUBBER ELASTICITY — 217

LESSON 16: REPTATION — 232

LESSON 17: SCATTERING METHODS IN POLYMER SCIENCE — 243

LESSON 18: LIGHT SCATTERING ON POLYMERS — 255

LESSON 19: LIGHT SCATTERING ON POLYMER GELS — 267

LESSON 20: DILUTE POLYMER SOLUTIONS — 279

LESSON 21: SEMI-DILUTE POLYMER SOLUTIONS — 292

LESSON 22: POLYMER NETWORKS AND GELS — 304

LESSON 23: POLYMERS IN BULK SOLID STATES — 321