

CONTENTS

<i>Preface</i>	v
Introduction	1
Types of Models	3
Data Requirements	9
Theoretical Development	48
Flow Equations	48
Types of Simulators	59
Solution Techniques	64
PVT Data	74
Relative Permeability and Capillary Pressure Data	85
Transmissibilities	110
Gridding Considerations	118
Well Packages	132

Field Studies	137
Other Types of Models	148
Radial Simulators	151
Dual Porosity Simulators	154
Odds and Ends	156
Advantages of Reservoir Simulation	158
Disadvantages of Reservoir Simulation	159
References	160
Simulation and Reservoir Property Books	160
Appendix A	161
Fluid and Formation Correlations	161
Solutions to Problems	176
Index	201