

Contents

1	Introduction	1
	Yuguang Ye	
2	Development of the Experiment Detection Technique	19
	Yuguang Ye	
3	Relationship Between Acoustic Properties and Hydrate Saturation	89
	Gaowei Hu, Yuguang Ye, Jian Zhang, and Shaobo Diao	
4	Detecting Hydrate in Porous Media Using Electrical Resistance . . .	127
	Qiang Chen, Shaobo Diao, and Yuguang Ye	
5	Thermophysical Properties of Gas Hydrate in Porous Media	141
	Qiang Chen, Shaobo Diao, and Yuguang Ye	
6	Experimental Techniques for Permeability and Mechanical Properties of Hydrate-Bearing Sediments	169
	Jian Zhang, Yuguang Ye, Gaowei Hu, and Shaobo Diao	
7	Experimental Studies of Marine Gas Hydrate Geochemical Anomalies	193
	Changling Liu, Min Chen, Yuguang Ye, and Qiang Chen	
8	Experimental Simulation of Hydrate Accumulation and Dispersion in Pore Fluids	217
	Wanjun Lu, Feifei Wang, and Menghan Wang	
9	Stable Conditions of Marine Gas Hydrate	239
	Shicai Sun, Yuguang Ye, Changling Liu, and Jian Zhang	
10	Natural Gas Hydrate Dissociation	261
	Qingguo Meng, Changling Liu, Qiang Chen, and Yuguang Ye	

11 Experimental Studies on Techniques to Extract Natural Gas Hydrate 285
Changling Liu, Jianye Sun, and Yuguang Ye

12 Measurement of Gas Hydrate by Laser Raman Spectrometry 327
Changling Liu, Qingguo Meng, and Yuguang Ye

13 Application of Modern Instruments Measurement Techniques for Hydrate Research 367
Gaowei Hu, Qiang Chen, Qingguo Meng, and Yugang Ye

Index 395