

| | |
|-------------------------|---|
| 1. Record Nr. | UNINA9910782232503321 |
| Autore | Alfadala Hassan E |
| Titolo | Proceedings of the 1st Annual Gas Processing Symposium [[electronic resource]] : 10-12 January, 2009 - Qatar |
| Pubbl/distr/stampa | Burlington, : Elsevier Science, 2008 |
| ISBN | 1-282-28591-2 9786612285912 0-08-093297-5 |
| Descrizione fisica | 1 online resource (457 p.) |
| Collana | Advances in gas processing |
| Altri autori (Persone) | ReklaitisG.V. Rex El-HalwagiMahmoud M |
| Disciplina | 665.73 665/.7 |
| Soggetti | Natural gas -- Storage -- Congresses Natural gas -- Storage -- Security measures -- Congresses Natural gas -- Transportation -- Congresses Chemical & Materials Engineering Engineering & Applied Sciences Chemical Engineering |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Description based upon print version of record. |
| Nota di contenuto | Front Cover; Proceedings of the 1st Annual Gas Processing Symposium; Copyright Page; List of Contents; Preface; International Technical Committee; Part 1: Liquefied Energy Chain; Chapter 1. A Multi-Paradigm Energy Model for Liquid Natural Gas Analysis; Chapter 2. Dynamic Optimization of the LNG Value Chain; Chapter 3. Liquefaction Technology; Developments through History; Chapter 4. The Globalization of LNG Markets: Historical Context, Current Trends and Prospects for the Future; Chapter 5. The Liquefied Energy Chain; Part 2: Natural Gas Process Equipment Design Chapter 1. A Universal Methodology Based on SIMAR for Composing and Evaluating Expander - Based Processes Chapter 2. Application of Hybrid Coolers for Base Load LNG Liquefaction Plants; Chapter 3. Cost Estimation and Optimization of the Topping Unit Products at the Steady State Condition; Chapter 4. Minimum Energy Operation of Petlyuk |

Distillation Columns - Nonsharp Product Specifications; Chapter 5. The Engineering of Compact Exchangers to Required Dimensions; Chapter 6. Towards the Dynamic Initialization of C4 Splitter Models; Part 3:

Process Design

Chapter 1. An Overview of New Methodologies for the Design of Cryogenic Processes with an emphasis on LNG Chapter 2. A Shortcut Thermodynamic Model for Simulating LNG Liquefaction Facilities; Chapter 3. Phase Behavior Concerns for Multicomponent Natural Gas-Like Mixtures; Chapter 4. Simulation and Energy Integration of a Liquefied Natural Gas (LNG) Plant; Chapter 5. Wide Range, High Accuracy P-T Measurements by Single Sinker Magnetic Suspension Densimeter for Natural Gas-Like Mixtures; Part 4: Process Synthesis and Optimization

Chapter 1. A Short-term Operational Planning Model for a LNG Production System Chapter 2. Development in Mixed Refrigerant Cycles Used in Olefin Plants; Chapter 3. Nuclear Technology for Frontier Advances in the Natural Gas Industry; Chapter 4. A Method for Optimal Operation of BOG Compression in a LNG Gasification Plant; Chapter 5. Optimizing Compressor Operations in an LNG Plant; Chapter 6. Synthesis of Heat Exchanger Networks Involving Phase Changes; Chapter 7. Towards a Framework for Systematic Innovation of Catalytic Gas Conversion Processes; Part 5: Process Control

Chapter 1. Maintenance Issues in Oil and Gas Processes: Detection of Valve Stiction Chapter 2. Single-cycle Mixed-fluid LNG Process - Part I: Optimal Design; Chapter 3. Single-cycle Mixed-fluid LNG Process - Part II: Optimal Operation; Chapter 4. Unlocking the Potential of Modern Control and Optimization Strategies in LNG Production; Part 6: Acid Gas Removal; Chapter 1. CO₂ Capture by Novel Amine Blends; Chapter 2. PVA/PVAm Blend FSC Membrane for Natural Gas Sweetening; Chapter 3. Simulation of an Acid Gas Removal Process Using Methyldiethanolamine; an Equilibrium Approach Chapter 4. Simulation of the Process of Biological Removal of Hydrogen Sulfide from Gas

Sommario/riassunto

As the cleanest source of fossil energy with the most advantageous CO₂ footprint, natural gas continues to increase its share in the global energy market. This book provides state-of-the-art contributions in the area of gas processing. Special emphasis is given to Liquefied Natural Gas (LNG); the book also covers the following gas processing applications in parallel sessions: * Natural Gas processing and treatment * Gas To Power and water* Gas To Liquid (GTL)* Gas To Petrochemicals, including olefins, ammonia and methanol* provides a state-of-the-art review of ga
