9th International Conference on Gas Hydrates

June 25 – 30, 2017

Denver, Colorado USA

Conference Program and Agenda

Final

Venue Information

The Conference venue is:

Denver Marriott City Center
1701 California Street
Denver CO 80202

Telephone: 303.297.1300

Website: http://www.marriott.com/hotels/travel/dendt-denver-marriott-city-center

Emergency Procedures

In the event of an emergency, the hotel alarms, both visual and audible, will sound throughout the hotel. An announcement will follow stating that the alarm you are hearing is being investigated and to remain where you are and calm until further notice. This same announcement will repeat as the alarm is being investigated. Please note, that an automated message may begin when an alarm is activated. The automated Message states people should evacuate and should be ignored by everyone as it pertains to the Office buildings above our hotel. Our announcement states that a hotel manager is speaking. That is the message that should be paid attention too.

If the alarm is resolved or false, the announcement will state that the alarm has been "investigated and cleaned" and to return to your normal operations. In the event that there is credibility to the alarm, the announcement will state that the hotel is being evacuated and to proceed to the nearest emergency exit. Your Event Planning Manager will be in communication with the Group Contact and instruct further information if needed.

Photography, Video, and Audio Recording

No photography or recording of video or audio is allowed in the technical session rooms at any time.

Mobile Phones

Please have your mobile phone on silence during the Conference.

Internet Access (Wi-Fi) in Meeting Area

Network (SSID): **Marriott_CONF**
Passcode: **icgh2017**

Welcome

Welcome to the Ninth International Conference on Gas Hydrates (ICGH9) held at the Denver Marriott City Center, Denver, Colorado, USA, from 25 - 30 June, 2017.

Beginning with only 64 attendees in 1993, the conference has met triennially, and grown to an attendance of almost 800 in Beijing at ICGH8. The conference has attracted a diverse community, including academic researchers, industrial scientists and engineers, government scientists and policy makers. ICGH9 should be an exciting conference that will provide the opportunity for participants to meet others in the same or different hydrate areas, and exchange ideas, expertise and experience, and renew and form new friendships and working relations.

The conference features over 675 papers and presentations. Delegates from around the world are expected to come together to exchange information and share their professional knowledge in the field of gas hydrates. The conference brings together a review of developments since ICGH8 and attempts to extrapolate for the near-term future.

The Local Organizing Committee would like to thank the organizations that have supported ICGH9. The financial support from sponsors and the exhibitors is greatly appreciated. Special thanks to the International Scientific Committee for their contributions and efforts to produce an outstanding program that covers the state-of-the-art in gas hydrate science and engineering in diverse research and technology areas.

Carolyn Koh, Chair
Dendy Sloan, Co-chair
Timothy Collett, Co-chair

Sponsors and Exhibitors

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NEP Geothermal Energy and Gas Hydrate Focus Center

SETARAM Instrumentation
KEP Technologies

9th International Conference on Gas Hydrates (ICGH9)

The 9th International Conference of Gas Hydrates (ICGH9) will again bring together the international gas hydrate research community to review developments over the previous three years and to take a look into the future. ICGH9 presentations cover an extraordinary range of gas hydrate research topics including, but not limited to fundamental physical properties, applied flow assurance*, geologic characterization of gas hydrate controls, energy recovery from natural hydrates, and the role of gas hydrates in the global carbon cycle. The conference is structured so that participants can learn from both formal and informal interactions, through presented papers, posters and social events.

* *The Flow Assurance sessions of the Conference will be convened in honor of E. Dendy Sloan, in recognition of his Outstanding Career Achievements.*

The ICGH9 web site, which is smart phone and tablet friendly, has been designed to be your primary source of information about all aspects of the conference. If you have any question please visit the ICGH9 web site at the following address: http://csmspace.com/events/icgh9/

Local Organizing Committee

Carolyn Koh; Chair, Colorado School of Mines, USA
Dendy Sloan; Co-chair, Colorado School of Mines, USA
Tim Collett; Co-chair, United States Geological Survey, USA

International Scientific Committee

Ray Boswell; National Energy Technology Laboratory (NETL), USA
Peter Englezos; University British Columbia, Canada
Jean-Michel Herri; Ecole Natl. Superieure des Mines de St-Etienne, France
Sung-Rock Lee; Korea Institute of Geoscience and Mineral Resources, Korea
Xiaoyun Li; Statoil, Norway
Ryo Matsumoto; Meiji University, Japan
Thierry Palermo; Total, France
Judith Schicks; GFZ German Research Centre for Geosciences, Germany
Bahman Tohidi; Heriot-Watt University, UK
Klaus Wallmann; Geomar, Germany
Nengyou Wu; Qingdao Institute of Marine Geology, China Geological Survey, China

Local Contact Information

Colorado School of Mines
Continuing and Professional Education
1600 Jackson Street
Golden, Colorado 80401 USA
Voice: 1.303.279.5563
Fax: 1.303.277.8683

Contact ICGH9 Management by email at icgh9@csmspace.com

ICGH9 Location

ICGH9 will be held at the Denver Marriott City Center in Denver, Colorado USA. Rooms in the hotel are available at special rates for attendees of ICGH9. See the "Location" tab on the ICGH9 website for more information and for a link to the special hotel registration website. http://csmspace.com/events/icgh9/location.html

Local Transportation

The "**Transportation**" tab on the ICGH9 website provides detail information on the Denver International Airport and use of the Regional Transportation District (RTD) Train, Light Rail, and Bus system to travel from the airport to the ICGH9 hotel in Denver and throughout the region. http://csmspace.com/events/icgh9/transportation.html

Registration

All participants in ICGH9 must complete the online registration form and pay the appropriate registration fee through the "**Registration**" tab on the ICGH9 website. <http://csmspace.com/events/icgh9/registration.html>

Conference Proceedings

All of the conference presenters have contributed either full manuscripts or extended abstracts that have been included in the Conference Proceedings. On arrival at ICGH9, each conferee will be provided with a flash/thumb drive containing all ICGH9 manuscripts and extended abstracts. However the copyright to each work is held by the author. For this reason all requests for copies of manuscripts or extended abstracts should be requested of the original author(s). Copies of the conference extended abstracts and manuscripts will not be provided to non-ICGH9 attendees.

Conference Presentations

Directions and IMPORTANT information on the preparation of oral and poster presentations are available for download through the "Presentation" tab on the ICGH9 website. http://csmspace.com/events/icgh9/presentations.html

A total of 184 selected submissions will presented during ICGH9 within a series of oral sessions (each session will comprise 6 oral presentations) convened throughout the conference each lasting for 2 hours. Authors will present their research in a specific topic area, and each session will be moderated by experts in the field. ICGH9 will also have a total of four all day poster sessions, starting with one on Monday (Poster Session 1), Tuesday (Poster Session 2), Thursday (Poster Session 3), and the last on Friday (Poster Session 4).

Exhibits

Exhibits will be open to the Conference attendees Monday, Tuesday, and Thursday 7.30 to 17.00; Wednesday 7.30 to 12.00; and Friday 7.30 - 15.00.

Social Events

ICGH9 will open on Sunday evening, 25-June-2017, at 18:30hr with a "Welcome Reception" and "Keynote Address" at 19:30hr. Following registration, ICGH9 delegates are invited by the Local Organizing Committee to join their colleagues for drinks and appetizers. Timothy S. Collett will give an opening keynote speech titled "*Why Not Gas Hydrates?*' that will deal with the motivations that may eventually lead to the commercial production of gas hydrates.

On Wednesday afternoon, 28-June-2017, conference delegates will have the opportunity to join your colleagues on a tour of some of the more famous Rocky Mountain "Front Range" destinations. See the "Group Tour" tab on the ICGH9 website for more information on the conference excursion. The conference delegates who desire to participate in the conference excursion should check the appropriate box on the registration form at the time of registration.

The conference excursion participants will assemble near the conference hotel lobby at 11:00hr on Wednesday, 28 June 2017. The tour group will travel by bus and visit the Red Rocks Park and Amphitheatre, while visiting the park we will have lunch. After Red Rocks, the tour will continue with a visit to the Buffalo Bill Overlook, Grave Site, and Museum that overlooks the town of Golden. The excursion will also include a guided tour of Dinosaur Ridge, which is one of the world's most famous dinosaur fossil localities. A limited number of delegates participating in the ICGH9 excursion will have the opportunity to tour the laboratory facilities at the Colorado School of Mines Center for Hydrate Research. The Center for Hydrate Research tour will be limited to 50 conference delegates, who will need to register for this tour in advance at the conference registration desk. http://csmspace.com/events/icgh9/group_tour.html

The ICGH9 Conference and Award Banquet is scheduled for Thursday night, 29-June-2017, starting at 19:30hr. The theme for night festivities and entertainment is the "Word of Gas Hydrates". Each conference delegate wanting to participate in the Conference and Award Banquet will need to register and pay for the banquet using the online registration form under the "Registration" tab on the ICGH9 web site. Contact space@mines.edu if you have already registered and want to add the banquet (prior to June 23). A few additional banquet tickets will be available for sale at the registration desk Monday, June 26. There will be no additional sale of banquet tickets after that date. http://csmspace.com/events/icgh9/registration.html

Hotel Floor Plan (Conference Venue Map)

L O C A T I O N S

On-site registration and check-in; Welcoming Reception • Sunday: **Reception-Registration Area (Lobby, Lower Level 2)**

Keynote Address and Welcoming Remarks • Sunday: **Denver Ballroom**

Welcome and Plenary Session • Monday: **Denver Ballroom**

Oral Sessions A • Monday - Friday: **Penrose**

Oral Sessions B • Monday - Friday: **Denver Ballroom 4-6**

Oral Sessions C • Monday - Friday: **Denver Ballroom 1-3**

Poster Sessions • Monday, Tuesday, Thursday, Friday: **Colorado Ballroom A-E**

Exhibits • Monday - Friday: **Colorado Ballroom A-E**

Lunches • Monday, Tuesday, Thursday, Friday: **Colorado Ballroom F-J**

Breaks • Monday - Friday: **Colorado Ballroom A-E**

Banquet • Thursday: **Colorado Ballroom F-J**

Conference Closing Session • Friday: **Denver Ballroom**

ICGH9 Quick Reference: Schedule and Locations

Sunday, June 25

Welcome to the 9th International Conference on Gas Hydrates!

The Conference opens this afternoon with on-site registration and check-in starting at 17.00 (5:00 PM) and with a welcoming reception starting at 18.30 (6:30 PM) in the Reception-Registration area.

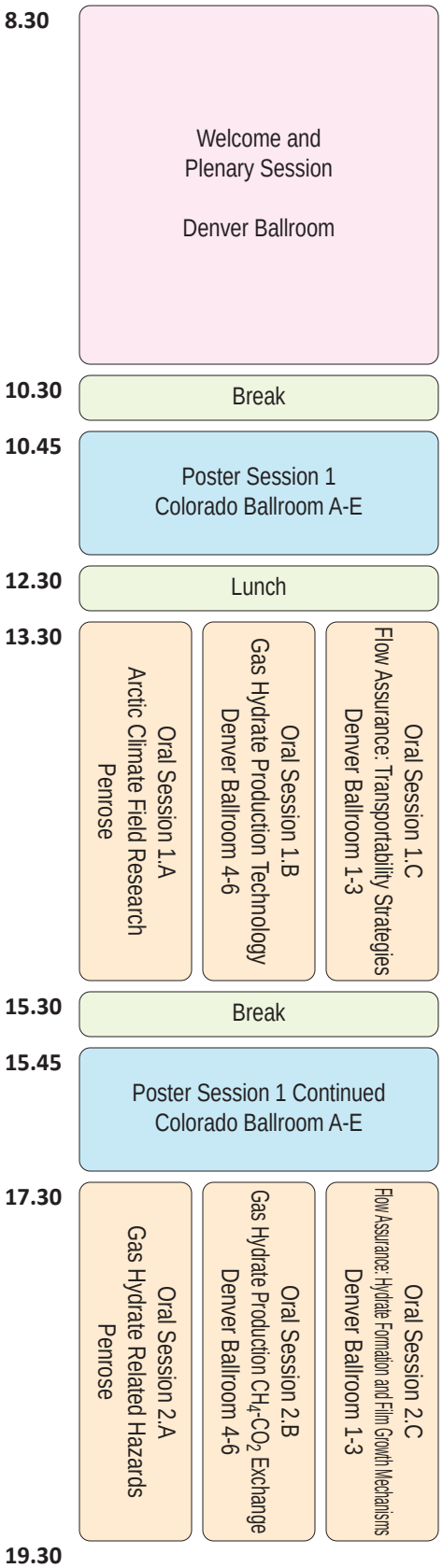
The Conference Keynote Address starts at 19.30 (7:30 PM) in the Denver Ballroom.

Refeshments at breaks are available in Colorado Ballroom A-E.

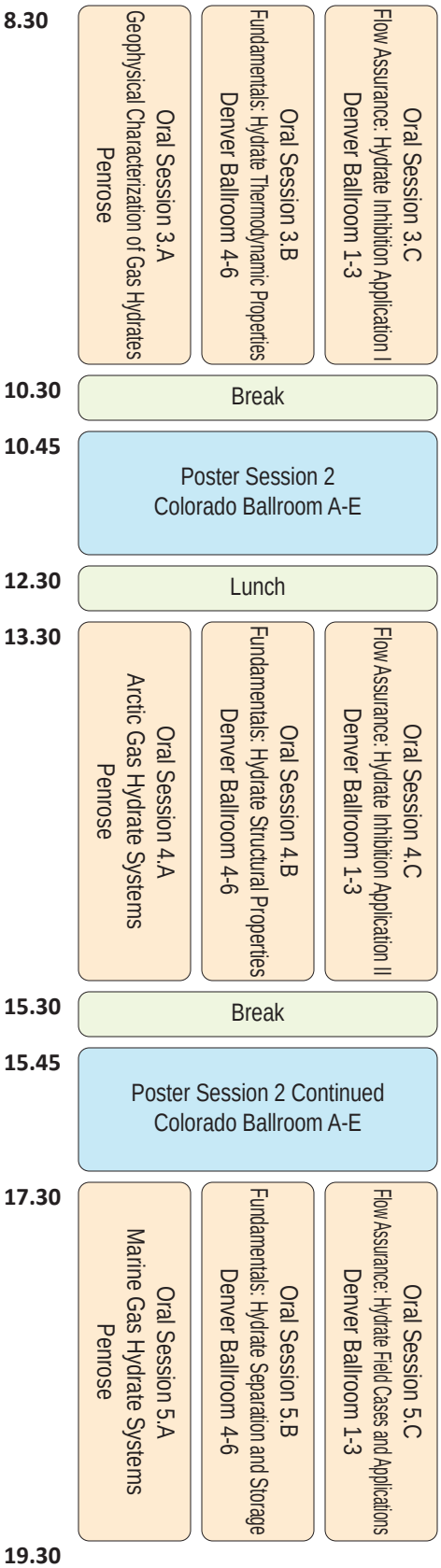
Lunches are served in Colorado Ballroom F-J.

Exhibits from firms and organizations involved with gas hydrate research or related industries are located in Colorado Ballroom A-E.

Monday, June 26



Tuesday, June 27



ICGH9 Quick Reference: Schedule and Locations

Wednesday, June 28

8.30
- Oral Session 6.A — Gas Hydrate Related Seep Systems — Penrose
- Oral Session 6.B — Fundamentals: Hydrate Molecular Simulations/Modeling — Denver Ballroom 4-6
- Oral Session 6.C — Flow Assurance: Hydrate Deposition Processes — Denver Ballroom 1-3

10.30 Break

11.00 Group Tour

Departs at 11.00
Returns at 17.30

17.30

Refeshments at breaks are available in Colorado Ballroom A-E.

Lunches are served in Colorado Ballroom F-J.

Exhibits from firms and organizations involved with gas hydrate research or related industries are located in Colorado Ballroom A-E.

Thursday, June 29

8.30
- Oral Session 7.A — Frontier Gas Hydrate Systems — Penrose
- Oral Session 7.B — Gas Hydrate Field Research Technologies — Denver Ballroom 4-6
- Oral Session 7.C — Flow Assurance: Hydrate Field Management — Denver Ballroom 1-3

10.30 Break

10.45 Poster Session 3
Colorado Ballroom A-E

12.30 Lunch

13.30
- Oral Session 8.A — Nankai Trough and Gulf of Mexico Gas Hydrate Systems — Penrose
- Oral Session 8.B — Physical Properties of Hydrate-Bearing Sediments — Denver Ballroom 4-6
- Oral Session 8.C — Fundamentals: Hydrate Interfacial Phenomena — Denver Ballroom 1-3

15.30 Break

15.45 Poster Session 3 Continued
Colorado Ballroom A-E

17.30

19.30 Banquet and
Awards Presentation
(Ticketed Event)
Colorado Ballroom F-J

22.30

Friday, June 30

8.30
- Oral Session 9.A — Sea of Japan Gas Hydrate Systems — Penrose
- Oral Session 9.B — Gas Hydrate Production Geomechanical Behavior — Denver Ballroom 4-6
- Oral Session 9.C — Fundamentals: Hydrate Kinetic Processes — Denver Ballroom 1-3

10.30 Break

10.45 Poster Session 4
Colorado Ballroom A-E

12.30 Lunch

13.30
- Oral Session 10.A — South China Sea Gas Hydrate Systems — Penrose
- Oral Session 10.B — Gas Hydrate Production Geomechanical Modeling — Denver Ballroom 4-6
- Oral Session 10.C — Fundamentals: Hydrate Nucleation and Growth Processes — Denver Ballroom 1-3

15.30 Break

15.45 Poster Session 4 Continued
Colorado Ballroom A-E

16.30 Conference Closing Session
Denver Ballroom

17.00 Conference Adjourns

icgh9

Conference Agenda

S U N D A Y , J U N E 2 5

17.00 - 20.30 — **Reception - Registration Area**

Registration

18.30 - 19.30 — **Reception-Registration Area**

Welcome Reception

19.30 - 20.30 — **Denver Ballroom**

Welcoming Remarks and Keynote Address: Timothy S. Collett - "Why Not Gas Hydrates?"

M O N D A Y , J U N E 2 6

07.30 - 17.00 — **Colorado Ballroom A-E**

Exhibits

08.30 - 10.30 — **Denver Ballroom**

Welcome and Plenary Session

2173	Palermo	France	Capex Savings Might Raise Flow Assurance Challenges
2211	Andreassen	Norway	Arctic Gas Hydrates in Petroleum Provinces
2019	Matsumoto	Japan	Occurrence and Origin of Thick Deposits of Massive Gas Hydrate, Eastern Margin of the Sea of Japan
1785	Schicks	Germany	From Lab to Field, from Micro to Macro – Test of Technologies for the CO2 Sequestration in Hydrates

10.30 - 10.45 — **Colorado Ballroom A-E**

Break (Refreshments are available)

10.45 - 12.30 — **Colorado Ballroom A-E**

Poster Session 1 - poster presentations listed below

12.30 - 13.30 — **Colorado Ballroom F-J**

Lunch

13.30 - 15.30 Penrose

Oral Session 1.A Arctic Climate Field Research

Chair(s): Bünz, S., Wallmann, K.

1741	Wallmann	Germany	Gas Hydrate Dissociation at the Continental Margin Off Svalbard Induced by Glacial Rebound Rather Than Global Warming
1558	Mau	Germany	Widespread Methane Seepage Along the Continental Margin of Svalbard - from Bjørnøya to Kongsfjorden
1408	Knies	Norway	Evidence for Active Methane Emission Above Arctic Gas Hydrate Systems Over the Past ~1.5 Million Years
1968	Vadakkepuliyam-batta	Norway	Climate Impacts of Methane Emissions from Hydrate Dissociation in the Arctic Over the 21st Century
1788	Andreassen	Norway	Gas Hydrate Regulate Methane Emissions from Arctic Petroleum Basins
1480	Portnov	Norway	Geophysical 3D Characterization of Gas Hydrate Pingos Offshore Svalbard

13.30 - 15.30 Denver Ballroom 4-6

Oral Session 1.B Gas Hydrate Production Technology

Chair(s): Baker, R., Moridis, G.

1468	Johnson	United States	Technology Options to Enable Low Environmental Risk Production of Natural Gas Hydrate
1517	Zhang	China	The Research on Pilot Production Technology of Gas Hydrates in Permafrost and Deep Sea
2165	Teymouri	United States	Analysis of Key Factors Affecting Gas Production from Hydrate Bearing Sediments
2044	Majid	United States	A Review of Methane Gas Recovery from Gas Hydrates Coupled with Carbon Dioxide Sequestration
1442	Zhang	China	In-Situ Observation of CH4 Recovery from Natural Gas Hydrate Using N2 Sweep
1975	Okwananke	United Kingdom	Compressed Air Injection for Methane Recovery from Gas Hydrate-Bearing Sediments

13.30 - 15.30 Denver Ballroom 1-3

Oral Session 1.C Flow Assurance: Transportability Strategies

Chair(s): Estanga, D., Lederhos, J.

2136	Turner	United States	Hydrate Blockage-Limiting Mechanisms that Support Cold Transient Operation
2183	Glenat	France	Good Transportability of Liquid Hydrates Slurries Made from Just Salty Waters (From 3 to 10% Wt. Nacl) and Gas
1871	Hirohama	Japan	Usage of Water Fugacity to Manage Margin for Flow Assurance
1784	Chen	United States	Measurements of Methane Hydrate Slurry Viscosity and Accumulation / Sloughing in a High Pressure Water Tunnel
2149	Pham	France	Experimental Study on Methane Hydrate Formation and Transport from Emulsions in a Gas Lift Riser Flowloop
1877	Boxall	United States	Hydrate Plug Dissociation Via Active Heating: Uniform Heating and Beyond, Plus a Simple Predictive Model

15.30 - 15.45 — Colorado Ballroom A-E

Break (Refreshments are available)

15.45 - 17.30 — Colorado Ballroom A-E

Poster Session 1 Continued - poster presentations listed below

17.30 - 19.30 — Penrose

Oral Session 2.A Gas Hydrate Related Hazards

Chair(s): Pecher, I., Uchida, S.

2258	Moridis	United States	Long-Term System Behavior Following Cessation of Gas Production from Hydrate Deposits
1744	Wu	Japan	Simple Modelling of the Mechanical Behaviour of Methane Hydrate-Bearing Sediments
1931	Pecher	New Zealand	Potential Mechanisms Linking Gas Hydrates to Slowly Deforming Submarine Landslides East of New Zealand: Evidence from Seismic Velocities
1629	Wei	China	Sea Floor Drilling and Artificial Methane Seeps
1697	Jun	United States	Effect of Hydrate on Rising Hydrocarbon Bubbles Released from Natural Gas Seeps in the Deep Ocean
2022	Sawyer	United States	Hydrate-Bearing Submarine Landslides in the Orca Basin, Walker Ridge, Gulf of Mexico Continental Slope

17.30 - 19.30 — Denver Ballroom 4-6

Oral Session 2.B Gas Hydrate Production CH4-CO2 Exchange

Chair(s): Howard, J., Spangenberg, E.

1513	Seo	South Korea	Experimental Verification of CH4 – CO2 or CH4 - Flue Gas Replacement That Occurs in Various Gas Hydrate Structures
1515	Schicks	Germany	From Micro to Macro: Experimental Investigations of the CO2/N2-CH4 Exchange Process in Gas Hydrates Under Conditions Similar to the Ignik Sikumi Field Trial in Different Scales
1764	Heeschen	Germany	Swapping Guests: Laboratory Large-Scale Experiments on CH4 Production by CO2-CH4 Exchange in a CH4 Hydrate Reservoir
1444	Kuhs	Germany	"Hole-in-Cage-Wall" Diffusion Model for Predicting Gas Replacement in Isostructural sI-sI Hydrate Systems applied to CH4-CO2 exchange
1856	Liu	China	Direct Shear Testing of Sand and Silt Containing Carbon Dioxide Hydrate
1796	Li	China	Field Trail Design and Basic Experiment of Gas Production from Nature Gas Hydrates by CO2/N2 Replacement in Qilian Mountain, Qinghai, Northwest China

17.30 - 19.30 — Denver Ballroom 1-3

Oral Session 2.C Flow Assurance: Hydrate Formation and Film Growth Mechanisms

Chair(s): Glenat, P., Li, X.

1979	Keinath	United States	Experimental Investigation of Hydrate Film Growth Phenomena and Its Application
1467	Merkel	Germany	Feasibility Study Concerning Gas Hydrate Inhibition in Pipelines Via Permanent Functional Coating
1874	Aman	Australia	Interfacial Phenomena in Gas Hydrate Systems
2156	Herri	France	Modeling Non-Equilibrium Crystallization of Gas Hydrates Under Stratified Flow Conditions
2039	Charlton	Australia	Hydrate Blockage Formation in Gas-Dominant Systems
1876	May	Australia	Statistically Significant Measurements of Hydrate Formation Probability Distributions with Varying Shear and System Composition

Posters for Monday, June 26

Climate Change and Geohazards

1	Crawford	United States	A Web-Based Global Seafloor Modeling System
2	Kim	South Korea	Identification of Debris-Flow Activity Caused by Slope-Failures in the Ulleung Basin, East Sea: Implications for the Plio–quaternary Sedimentation
3	Whorley	United States	Investigating the Response of Methane Hydrate to Modern Bottom Water Warming Along the Upper Continental Slope of the Cascadia Margin

Energy Recovery

4	Ahn	South Korea	Depressurization-Induced Production Behavior of Methane Hydrate in a Meter-Scale Alternate Layer of Sand and Mud
5	Bhattacharjee	India	A Study of Natural Gas Hydrate Dissociation in the Presence of Novel Benign Additives
6	Castellani	Italy	CH4-CO2 Replacement in Natural Gas Hydrates and Membrane-Based CH4 Recovery: Energy and Environmental Evaluation
7	Chiu	Taiwan	Coupled Geomechanics and Fluid Flow Modeling on Gas Production from Hydrate Deposits: a Case Study in Taiwan
8	Dong	China	Modular Production System by Decomposing Natural Gas Hydrate and Separating the Sediments from NGH Slurry on Seabed
9	Filarsky	Germany	Development of a Biogas Production and Upgrading Process Under the Use of Promoted Gas Hydrate Formation
10	Hao	China	Coupled Multi-Phase Interactions Model for Carbon Doxide(CO2) Storage and Sequestration Using Hydrates Formation Method in Porous Geomaterial
11	Jang	United States	Impact of Pore-Water Freshening on Clays and the Compressibility of Hydrate-Bearing Reservoirs During Production
12	Kneafsey	United States	Experimental Observations of Methane Hydrate Dissociation in Layered Media
13	Sasaki	United Kingdom	Effect of Wellbore Construction on Formation Integrity in Shallow Offshore Methane Hydrate Reservoir
14	Wang	China	Energy Efficiency Analysis of Natural Gas Hydrate Exploitation by Flue Gas
15	Zhang	China	Drilling Simulation in Hydrate-bearing Sediment Using a Novel Hydrate Drilling Simulator

Flow Assurance

16	Abrahamsen	Norway	Comparison of KHI Performance on SI Vs SII Hydrate-Forming Gases for a Range of Polymer Classes

17	Abrahamsen	Norway	As Green As It Gets! - A Natural Product Kinetic Hydrate Inhibitor
18	Alavoine	France	Elastic Properties of Gas Hydrates Bearing Sediments Based on Micro-Mechanical Approaches
19	Aman	Australia	Characterization of Crude Oils That Naturally Resist Hydrate Plug Formation
20	Bassani	Brazil	A Steady-State Approach for Modeling Three-Phase Solid-Liquid-Gas Slug Flow with Hydrate Formation
21	Canale	Italy	Graphene-Coated Surfaces Show Inhibition of Hydrate Adhesion
22	Delroisse	France	Anti-Agglomerant Performance of Surfactants Evaluated in Cyclopentane Hydrate and CH4/C3H8 Gas Hydrate Systems
23	Dextre	Brazil	CFD Simulation of Hydrate Growth Rate on a Pipe Wall
24	Hu	United States	Correlation for Hydrate Suppression Temperature in High Salinity Brines
25	Kakitani	Brazil	Dynamics of Hydrate Behavior from Transient Experiments
26	Liu	China	Experimental Investigation on the Micromechanical Force Between Cyclopentane Hydrate Particles in the Existence of Water Bridge
27	Liu	United States	A Theoretical Model to Estimate the Mechanical Properties of Gas Hydrate Deposits on Pipeline Wall and its Implication for Deposit Sloughing
28	Longo	Brazil	Development of Impedance Sensors for Hydrate Detection
29	Morrissy	Australia	Adsorption of Nonionic Surfactants to Hydrate-Oil Interfaces
30	Naullage	United States	Adsorption of Surfactants to Clathrate Interfaces
31	Qin	Australia	Development of a New Rheological Model for Metastable Hydrate-in-Oil Slurries
32	Qureshi	Qatar	Amino Acids as Environmentally Friendly Low-Dosage Hydrate Inhibitors
33	Rehman	South Korea	Experimental Investigation of Tetrafluoroethane (R-134a) Hydrate Slurry Flow in Pipeline of Complex Configuration
34	Seo	South Korea	Evaluation of Hydrate Re-Formation in Transport Pipeline for Marine Hydrate Deposits: Combination of Multiphase Flow Simulation and Kinetics Experiments
35	Shi	China	Experimental Study on Natural Gas Hydrates Nucleation Induction Time in the Presence of Wax Crystal
36	Sum	United States	Bridging the Gap in Hydrates and Multiphase Flow
37	Wang	United States	Gas Hydrate Particle – Surface Interactions Under High Pressure & Low Temperature Conditions
38	Zhao	China	Flow Assurance during Deepwater Gas Well Testing: Hydrate Particle Behavior and Hydrate Plugging

Gas Hydrate Fundamentals

39	Ismail	United States	Characterization of Binary Clathrate Hydrates using DSC and Raman Spectroscopy
40	Andre	France	Characterization of Gas Hydrate Formation and Dissociation Using High Pressure Dsc
41	Animasahun	United Arab Emirates	Hydrate Based CO2 Capture (HBCC) from Flue Gas: a Process Design
42	Changling	China	Development of an Experiment System for Exploitation Simulation and Process Monitoring of Natural Gas Hydrate
43	Charlton	United States	A Quantitative Analysis of Hydrate Agglomerate Fractal Dimensions
44	Chen	China	Experimental Observation of Gas Hydrate Distribution in Porous Media Using Ultrasonic and Electrical Impedance Coupled Tomography
45	Chen	China	Carbon Dioxide Hydrate Separation from Syngas Based on Heat-Mass Coupling Technology

46	Chen	China	Complex Resistivity Characteristics Respond to Methane Hydrate in Porous Media
47	Chien	United States	An Overview of Burning Gas Hydrate Flame Color During Combustion
48	Clarke	Canada	A New Approach to Modelling of the Thermodynamic Equilibrium Conditions for the Formation of TBAB and TBAC Semi-Clathrates Formed in the Presence of Pure Gases and Mixed Gases
49	Coupan	France	CO2 Capture and Storage by Hydroquinone Clathrate Formation: Thermodynamic and Kinetic Studies.
50	de Oliveira	Brazil	Assessment of Parameter Estimation Strategies to Calculate Simple and Binary Tetrahydrofuran Dissociation Conditions
51	Du	China	Electromagnetic Property Research on Physical Model of Laboratory Hydrate
52	Du	Australia	Development of a Multi-Cell System to Quantify Hydrate Formation Probability
53	Dufour	France	Dynamic Modeling of an Air Conditioning System Coupled with Thermal Energy Storage by CO2 Hydrates and Water
54	Eswari	India	Effect of Silica and Stirring Rate on Growth Kinetics of Methane+propane Mixed Hydrate
55	Fu	United States	Controlled Depressurization of a Hydrate-Crusted Gas Bubble: Insights from 2d Experiments and Phase-Field Modeling
56	Hashimoto	Japan	Gas Storage Capacity and Selectivity of CO2 and N2 for Ionic Clathrate Hydrates
57	Hassanpouryou-zband	United Kingdom	CO2 Capture and Methane Recovery by Direct Injection of Flue Gas into Frozen Gas Hydrate-Bearing Sediments
58	Hiratsuka	Japan	Guest-Host Interactions of the Ionic Semiclathrate Hydrate from Ab Initio Molecular Dynamics Simulation
59	Holzammer	Germany	Experimental Study of the Amount of Gas Hydrates in Macroscopic Single and Two Phase Water CO2 Mixtures
60	Inkong	Thailand	Pressure and Temperature Effects on Methane Hydrate Formation and Dissociation with the Presence of Tetrahydrofuran (THF) Promoters
61	Khan	United States	Comparison of the Accuracy of Inhibited Hydrate Phase Equilibria Calculations Using Physical Electrolyte Models and Mean Field Spherical Approximation
62	Kim	South Korea	Hydrate Formation in MEG and Electrolyte Solutions: Thermodynamic and Kinetic Study to Develop Under-Inhibition Strategy
63	Komatsu	Japan	Aggregation and Flow Characteristics of Semi-Clathrate Hydrate Slurries with Dispersants
64	Komatsu	Japan	Analysis of Transport Phenomena at Methane Hydrate Particle-Fluid Interface with a Multiple Dissociation Model
65	Lee	South Korea	Enhanced Methane Storage in Clathrate Hydrates Induced by Antifreezes
66	Lele	China	Experimental and Numerical Studies on Depressurized Dissociation Front of Synthetic Methane Hydrate in Porous Media
67	Lin	United States	Geomechanical Analysis of Initial Stage of Gas Production from Interbedded Hydrate-Bearing Sediment
68	Liu	China	Design of Experimental Loop for Natural Gas Hydrate
69	Liu	China	Dynamics Mechanism of Carbon Dioxide Hydrate Formation in Submarine Sediments
70	Long	China	Dual Inhibition Effect of Ionic Liquids on Hydrate Formation
71	Luzi-Helbing	Germany	Dissociation Kinetics of CH4 Hydrate, Mixed CH4 + CO2 Hydrate and Mixed SII Hydrates

72	Medeiros	Brazil	Determination of Hydrate Enthalpy of Formation from Statistical Thermodynamics
73	Mozafari	Canada	Characterization of Free Radicals in Clathrate Hydrates of Furan, 2,3-Dihydrofuran and 2,5-Dihydrofuran by Muon Spin Spectroscopy
74	Muraoka	Japan	Evaluation of the Performance of Kinetic Inhibitor for Clathrate Hydrate by Using the Unidirectional Growth Apparatus
75	Muromachi	Japan	Crystal Structure Analyses on Ionic Clathrate Hydrates of tetra-n-butylammonium and tetra-n-butylphosphonium Salts Formed with CH4 or CO2 Gas
76	Naeiji	Iran	Differential Scanning Calorimetry Studies of Tetrahydrofuran Hydrate Formation in the Presence of Sodium Salts
77	Phillips	United States	Dissociation of Laboratory-Synthesized Methane Hydrate in Coarse-Grained Sediments by Slow Depressurization
78	Qiang	China	Effect of Montmorillonite on Separation of Gas Hydrate
79	Qin	United States	A Prediction Tool for Hydrate Phase Equilibria in the Presence of High Concentrations of Inhibitors
80	Rajput	Canada	Amphiphilic Block Copolymers as Methane Hydrate Kinetic Inhibitors.
81	Renault-Crispo	Canada	Analysis of the Role of Induction Time on Gas Hydrate Kinetics: Study of TBAB/SDS with Nanoparticles
82	Servesko	United States	Brine Composition Effects on the Performance of Anti-Agglomerate Low Dose Hydrate Inhibitors (AA-LDHIs)
83	Singh	United States	A Non-Empirical Relative Permeability Model for Multi-Phase Flow in Hydrate-Bearing Sediments
84	Tantciura	Norway	Convective Heat Transfer Coefficient Determination During Methane Hydrate Growth
85	Usman	South Korea	Degasification of Aqueous Tetrafluroethane (R-134a) Solution Produced by Hydrate Decomposition During Sea Water Desalination
86	Veluswamy	Singapore	Amino Acids as Kinetic Promoters to Enhance Methane Hydrate Formation
87	Waite	United States	Laboratory Observations of the Evolution and Rise Rate of Bubbles with and Without Hydrate Shells
88	Wang	China	Experimental Study on Dynamic Formation of Methane Hydrate in Porous Medium
89	Xing	China	Development of a Testing System for Conjointly Characterizing the Acoustic and Electrical Properties of Hydrate-Bearing Porous Media
90	Yu	China	Accelerated Formation of Methane Hydrate in Iced Dry Water
91	Yuhara	Japan	Analysis of Three Phase Co-Existence Conditions for Methane Hydrate, Methane Vapor, and Liquid Water Using Isothermal-Isometric Molecular Dynamics Simulation
92	Zhang	China	Controlling the Temperature Increases of Constant Energy Simulations Through an Ice-Solution-Gas System: Application to Methane Hydrate Formation
93	Zhou	China	Effect of Graphite Nanoparticles and SDS on Hydrate Characteristics

Gas Hydrates in Nature

94	Almenningen	Norway	Direct Pore-Level Visualization of Methane Hydrate Growth in an Authentic Sandstone Replicate
95	Bello-Palacios	Norway	Basin Modelling of Gas Hydrate Accumulations on Deep Marine Sediments
96	Dafov	United States	Basin and Petroleum System Modeling of Gas Hydrate Deposits in the Walker Ridge Area, Northern Gulf of Mexico

97	Fagen	China	AMT Forward Modeling Research on Detecting Natural Gas Hydrate in Muli Permafrost Area, Qinghai Province, China
98	He	China	Distribution Characterhistics of Permafrost and Faults, Two Forming Elements of Natural Gas Hydrate in Muli District of Qinghai, China
99	Huang	China	Estimation of the Gas Production Potential of Hydrate Deposits at the Four Coring Sites During the GMGS-3 Expedition
100	Kang	China	Application of Elemental Capture Spectroscopy to the Evaluation of Gas Hydrate Reservoir
101	Lewis	United States	Brookian Sequence Well Log Correlation Sections and the Occurrence of Gas Hydrates Along the North-Central North Slope of Alaska
102	Minagawa	Japan	Estimation of the Hydraulic Permeability of Methane - Hydrate - Bearing Sediment Using the Proton NMR-T2 Distribution, Focusing on the Effect of Salinity on NMR-T2 Measurements of Methane Hydrate Sediments
103	Ruwei	China	Estimation of Gas Hydrate-Bearing Sediments Using Prestack Ava Inversion and Seismic Attenuation in the Shenhu Area of Northern South China Sea
104	Shedd	United States	Distribution of Possible Hydrate Occurrences Relative to Hydrocarbon Seepage and Seafloor Bathymetry in the Northern Gulf of Mexico
105	Shengxiong	China	Concentrated Gas Hydrate in the Shenhu Area, South China Sea: Results From Drilling Expeditions GMGS3 & GMGS4
106	Silva	Brazil	Anomalously Shallow Bottom-Simulating Reflections on the Upper Amazon Deep-Sea Fan Record Gas Hydrate Response to Upward Fluid/Heat Flux
107	Sun	China	Inert Gas- An Effective Technique for Exploration of Natural Gas Hydrate
108	Sunjay	India	Gas Hydrate Prospecting by Electromagnetic Geophysical Data Analysis
109	Wang	China	Cold Source Selection Experiments of Hole-Bottom Freezing Method for Gas Hydrate Sampling
110	Wood	United States	A New Method of Globally Modeling Gas and Gas Hydrate in Marine Sediments
111	Zhang	China	Halogen Elements I and Cl: The Exploratory Elements of Gas Hydrate in Permafrost Area
112	Zhang	China	Characteristics Of Natural Gas Hydrate Reservoir in Muli Permafrost
113	Zhenyu	China	Estimation of Gas Hydrate Saturation Using Seismic Multi-Attribute Analysis
114	Zyrianova	United States	Characterization of the Structural-Stratigraphic and Reservoir Controls on the Occurrence of Gas Hydrate in the Eileen Gas Hydrate Trend, Alaska North Slope

T U E S D A Y , J U N E 2 7

07.30 - 17.00 **Colorado Ballroom A-E**

Exhibits

08.30 - 10.30 **Penrose**

Oral Session 3.A Geophysical Characterization of Gas Hydrates

Chair(s): Frye, M., Kang, N.

2162	McConnell	United States	Gas Hydrate Characterization from a 3D Seismic Dataset in the Deepwater Eastern Gulf of Mexico
1892	Madof	United States	Imaging the Next Energy Frontier: a New Method for Identifying and Quantifying Gas Hydrates

1719	Marín-Moreno	United Kingdom	Theoretical Modeling Insights into Elastic Wave Attenuation Mechanisms in Marine Sediments with Pore-Filling Methane Hydrate
1933	Sahoo	United Kingdom	Effect of Methane Hydrate Saturation and Morphology on the Geophysical Properties of Sub-Seafloor Sediments
1946	Yiqun	China	Prediction of Gas Hydrates Through Broadband Processing and Full Waveform Inversion on Marine Streamer Data, a Case Study in the South China Sea
2021	Praeg	France	Geophysical Evidence of Gas Hydrates Associated with Widespread Gas Venting on the Central Nile Deep-Sea Fan, Offshore Egypt

08.30 - 10.30 Denver Ballroom 4-6

Oral Session 3.B Fundamentals: Hydrate Thermodynamic Properties

Chair(s): May, E., Peters, C.

2079	Ranieri	Switzerland	Guest Dynamics in High-Pressure Clathrate Hydrates
1674	Bouillot	France	Thermodynamic Framework for Successive Flash Calculations Involving Mixed Clathrate Hydrates
2038	Majid	United States	Carbon Dioxide Sequestrations Coupled with Seawater Desalination Using Gas Hydrates
2023	Beltran	Canada	A 3-In-1 Method to Study Gas Hydrates
1951	Zhong	China	Self-Preservation of Gas Hydrates During Dissociation Below the Ice Point: an in Situ Study Using Raman Spectroscopy
1447	Dong	China	Hydrate-Based Heavy Metal Removal from Aqueous Solution

08.30 - 10.30 Denver Ballroom 1-3

Oral Session 3.C Flow Assurance: Hydrate Inhibition Application I

Chair(s): Turner, D., Webber, P.

1763	Askvik	Norway	Natural Kinetic Inhibition of Gas Hydrates in Oil and Gas Production
2184	Glenat	France	Rheological Study of Liquid Hydrate Slurries in Presence of Commercial Hydrates Dispersants (AA-LDHIs)
2172	Meiklejohn	United Kingdom	Efficiency of Low Dosage Hydrate Inhibitor Performance After Being Exposed to Elevated Temperature
2255	Bellucci	United States	Molecular Dynamics Analysis of Surface Adsorption in Natural Gas Hydrates
1440	Bui	United Kingdom	Evidence of Structure-Performance Relation for Surfactants Used as Anti-Agglomerants for Hydrates Management
1861	Yao	China	Field Evaluation Technology and Experimental Analysis on Low Dosage Hydrate Inhibitors

10.30 - 10.45 Colorado Ballroom A-E

Break (Refreshments are available)

10.45 - 12.30 Colorado Ballroom A-E

Poster Session 2 - poster presentations listed below

12.30 - 13.30 Colorado Ballroom F-J

Lunch

13.30 - 15.30 Penrose

Oral Session 4.A Arctic Gas Hydrate Systems

Chair(s): Andreassen, K., Johnson, A.

2191	Bünz	Norway	Gas Hydrate Systems on Arctic Margins Around Svalbard and in the Barents Sea
1463	Serov	Norway	Environmental Changes of the Last Glacial Cycle Controlling a Re-Emerging Arctic Gas Hydrate System
1647	Plaza-Faverola	Norway	The Effect of Thermogenic Gas Sources on Bottom-Simulating Reflector Dynamics: an Example from Vestnesa Ridge, Offshore West-Svalbard
1661	Waage	Norway	4D Time-Lapse Seismic Analysis of Active Gas Seepage Systems on the Vestnesa Ridge, Offshore W-Svalbard
1560	Waghorn	Norway	Shallow Methane Hydrate Accumulations on the Svyatogor Ridge, Fram Strait; Influence of Tectonic Regime on Sustaining Long-Lived Gas Hydrate Systems
1939	Chuvilin	Russian Federation	Influence of Pore Hydrate Dissociation on Permeability of Frozen Hydrate-Saturated Soils

13.30 - 15.30 Denver Ballroom 4-6

Oral Session 4.B Fundamentals: Hydrate Structural Properties

Chair(s): Kneafsey, T., Kuhs, W.

1906	Klapproth	Australia	Inelastic Neutron Scattering of Methane-Propane Clathrate Hydrates
1678	Chazallon	France	Structure Change Induced by Guest Encapsulation in Semi-Clathrate Hydrates Probed by Raman Spectroscopy: Application to CO2 Capture
1974	Lee	South Korea	The Macroscopic and Microscopic Study of Hydrate Formation and Decomposition by In-Situ Raman Spectroscopy
1902	Piltz	Australia	Neutron Diffraction Studies of Mixed Methane-Propane Hydrate Kinetics
1718	Belosludov	Japan	Atomistic-Level Description of Clathrate Hydrates Structure-Property Relationships Toward Gas Storage and Separation: Lattice Dynamics and First-Principles Methods
1910	Prasad	India	Enhanced Methane Gas Storage in Hydrates: Role of the Confined Water Molecules in Silica Powders

13.30 - 15.30 Denver Ballroom 1-3

Oral Session 4.C Flow Assurance: Hydrate Inhibition Application II

Chair(s): Crosby, D., Rivero, M.

2235	Estanga	United States	Low Dosage Hydrate Anti-Agglomerant Failure During Pipe Flow
2187	Glenat	France	Natural Kinetic Hydrates Inhibitors of Crude Oils
1470	Bartels	United States	Liquid Hydrocarbon Phase Effect on KHI Testing
1795	Park	South Korea	Hydrogel Particles Incorporating Thermodynamic Inhibitors: Effect on Hydrate Shell Growth and Plug Formation

1982	Raman	United States	Effect of Solid Particle Wettability on Hydrate Forming Water-In-Oil Emulsions in the Presence of Wax
1471	Nagappayya	United States	Old Technology, New Market – LDHI in US Onshore

15.30 - 15.45 — Colorado Ballroom A-E

Break (Refreshments are available)

15.45 - 17.30 — Colorado Ballroom A-E

Poster Session 2 Continued - poster presentations listed below

17.30 - 19.30 — Penrose

Oral Session 5.A Marine Gas Hydrate Systems

Chair(s): Lee, S., Malinverno, A.

1969	Meyer	United States	Methane Hydrate Formation in a Coarse-Grained, Brine-Saturated Sample Through the Induction of a Propagating Gas Front
1693	Daigle	United States	Methane Transport and Accumulation in Coarse-Grained Reservoirs in the Terrebonne Basin, Northern Gulf of Mexico
1992	You	United States	Methane Hydrate Formation in Thick Sand Reservoirs: Long-Range Gas Transport or Short-Range Methane Diffusion?
1970	Crutchley	New Zealand	Geophysical and Geochemical Characterisation of High Gas Flux Through a Thin Gas Hydrate Stability Zone on New Zealand's Hikurangi Subduction Margin
1832	Liu	China	The Mechanism of Methane Gas Migration Through the Gas Hydrate Stability Zone: Insights from Numerical Simulations
1847	Leung	United States	Investigation of Fracture Generation Due to Capillary Pressure Effects in a Three-Phase Hydrate Stability Zone

17.30 - 19.30 — Denver Ballroom 4-6

Oral Session 5.B Fundamentals: Hydrate Separation and Storage

Chair(s): Herri, J., Linga, P.

1701	Veluswamy	Singapore	Natural Gas Storage Via SNG (Solidified Natural Gas) Technology – Pathway to Commercialization
2032	Ferreira	Brazil	Computational Fluid Dynamics Simulation of Hydrate Formation in Water-In-Oil Emulsions
1762	Knappitsch	Germany	Enhanced Methane Storage Capacity in Hierarchically Ordered Porous Media by Gas Hydrate Formation
1635	Fakharian	Iran	Comparison of CO2 and CNG Hydrates Performance for Desalination of High Salinity Produced Water
2042	Lee	South Korea	Evaluation of Hydrate-Based Desalination and Wastewater Treatments
2207	Petuya	France	Revealing Preferential CO Trapping in Mixed Carbon CO/N2 Clathrate Hydrates

17.30 - 19.30 Denver Ballroom 1-3

Oral Session 5.C Flow Assurance: Hydrate Field Cases and Applications

Chair(s): Creek, J., Patel, Z.

2262	Subramanian	United States	Hydrates in Flare and Relief Systems
2265	Henderson	United Kingdom	Methanol Partitioning and Optimisation Study Using an Innovative Hydrate Inhibitor Monitoring Technology
1928	Austvik	Norway	Safety Issues During Hydrate Plug Removal by Depressurization
2139	Sinquin	France	Commercial Anti-Agglomerants Ways of Action in Simple Gas/condensate/water Systems
2034	Wang	United States	A Transient Hydrate Formation Model That Combines Oil- and Water-Dominated Systems
1878	Norris	Australia	Transient Hydrodynamic Simulation of Hydrate Blockage Formation in Oil and Gas Flowlines

Posters for Tuesday, June 27

Climate Change and Geohazards

1	Feng	China	Ages of Seep-Related Authigenic Carbonate from the Gulf of Mexico Continental Slope: Correlates with Sea-Level Fluctuations Over the Last 50,000 Years
2	Li	China	Creep Behaviors of Frozen Clayey Sediments Containing Methane Hydrate
3	Yang	United Kingdom	Comparative Study on the Effect of Ice and Hydrate on the Geomechanical Properties of Sediments

Energy Recovery

4	Chen	Japan	Numerical Simulation of Methane Hydrate Dissociation Flow: Thermal Considerations and Efficiency Analysis
5	Chong	Singapore	Experimental Study on the Production Behaviour from Hydrate Bearing Sediment incorporating a Horizontal Wellbore
6	Chong	Singapore	Experimental Analysis on the Production Behaviour from Hydrate Bearing Sediment Using Depressurization Method
7	Huang	China	Experimental Study of Reacting Methane Hydrate with Gaseous or Liquid CO2
8	Kakumoto	Japan	Experimental Estimation for Friction Strength at Contact Surfaces of Casing-Sediment and Cementing-Sediment for Methane Hydrate Production Well Integrity
9	Li	China	Experimental Study on Dissociation of Hydrate Reservoirs with Different Saturations by Hot Brine Injection
10	Oyama	Japan	Experimental Study of Mud and Floc Erosion in Turbidite Layers
11	Ruan	China	Numerical Simulation of Gas Production from Hydrate by Depressurization Combining with Well-Wall Heating
12	Sridhara	United States	New Technological Approach to Improve Gas Production from Class 2 Hydrate Deposits by Utilizing CO2 Sequestration
13	Sun	China	Experimental Research on the Influence of Temperature to Recovering Methane Gas from Hydrate-Bearing Sediments
14	Sun	China	Experimental Studies on Optimization Mode of Methane Recovery from Hydrate-Bearing Sediments by Ethylene Glycol Injection

15	Xiao-Guang	China	Sensitivity Analysis for Thermo-Hydro-Mechanical Response of Hydrate-Bearing Sediments During Gas Production Operation
16	Youhong	China	Numerical Analysis of Secondary Hydrate Evolution in Gas Hydrate Recovery Using Depressurization
17	Yu	United States	Numerical Simulation of Laboratory Experiments of CO2 Injection Induced CH4 Production from Gas Hydrate-Bearing Sediments

Flow Assurance

18	Azizi	Australia	Hydrate Shell Growth in Water-in-Oil Emulsions Measured by Low-Field NMR
19	Baek	South Korea	Inhibition Effects of the Particle Layer on the Hydrate Forming Oil – Aqueous Interface
20	Brown	United States	Hydrate Adhesion in the Presence of Waxes and Anti-Agglomerants
21	Glenat	France	Influence of SI & SII Hydrates Structures on Formation Rates and Hydrate Slurries Properties in Oil & Gas Systems
22	Hajiw	United Kingdom	Hydrate Phase Equilibria of Natural Gas Mixture plus Carbon Dioxide in the Presence of Thermodynamic Inhibitors: Experimental Measurements and Modelling
23	Hu	United States	Hydrate Management for Systems with High Salinity Brines at Ultra-High Pressures
24	Kakitani	Brazil	Hydrate Porosity Analysis from Hydrate Deposition Experiments
25	Kuteyi	Australia	High-Pressure Sapphire Autoclave Measurements of Under-Inhibited Systems
26	Lee	United States	Hydrate Deposition in Gas-Filled Vertical Pipes: Effect of Pipe Size
27	Lee	South Korea	Synergistic Effects of Dual Function Inhibitors and Conventional Inhibitors on Methane Hydrate Formation
28	Mahabadian	United Kingdom	Integrated Wax-Hydrate Formation in Real Oil Mixtures: What Factors Are Important from Thermodynamic Modelling?
29	Min	South Korea	Investigation on the Adhesive Behaviors and Growth Inhibition Strategies Between Clathrate Hydrate and Aqueous Phase
30	Pandey	India	High Pressure Rheological Studies of Methane Hydrate Slurries Formed from Water-Hexane Multiphase Systems
31	Qin	Australia	High-Pressure Measurement of Hydrate-in-Oil Slurry Viscosity and Yield Stress
32	Sa	United States	Hydrate Deposition in Gas-Filled Vertical Pipes: Deposit Characterization in an 1-inch System
33	Sa	United States	Ice & Hydrates Interactions on Pipe Walls and Influence of Commercial Hydrates Dispersants (AA-LDHIs)
34	Semenov	Russian Federation	Inhibition of Gas Hydrates with THI+KHI Mixtures
35	Seo	South Korea	Hydrate Plug Formation During Steady-State and Transient Operation: Prevention of Plugging with Synergistic Inhibition of MEG and KHI
36	Srivastava	United States	Industrial-Scale Flowloop Measurements to Investigate Hydrate Growth Mechanisms in High Pressure Saline Systems
37	Wang	China	Hydrate Formation and Deposition in a Mineral Oil + Water + Gas System
38	Zhang	United States	Hydrate Deposition in Gas-Filled Vertical Pipes: Reservoir and Wall Temperature Effects
39	Zhang	United States	Hydrate Deposition on Pipe Walls in Horizontal Flow for Gas-Liquid Systems

Gas Hydrate Fundamentals

40	Babu	Singapore	Optimization of Process Conditions for Clathrate Hydrate Based Desalination Process
41	Babu	Singapore	Optimum Heat Exchanger Network for LNG Cold Energy Utilisation in Clathrate Hydrate Based Desalination
42	Burnham	Ireland	Hydrogen-Hydrate Free-Energy and Cage-Hopping Calculations: Insights from Quantal and Classical Molecular-Dynamics Explorations
43	Cai	China	Kinetical and Raman Spectroscopic Studies on Hydrate-Based Carbon Dioxide Separation from IGCC in the Presence of Water-Solubility and Water-Insolubilty Promoter
44	Chazallon	France	N2-Clathrate: Raman Spectroscopic Evidence of Structure I and sII Formations and Guest Distributions
45	Chen	Taiwan	Kinetic Effect of Ethanol on Carbon Dioxide Hydrate Formation and Dissociation via Ice Seed Method
46	Clain	France	Heat and Mass Transfer Modeling Approach of Differential Thermal Analysis – Case Study of CO2 Hydrates Formation
47	Darnell	United States	Nitrogen-Assisted Three-Phase Equilibrium in Hydrate Systems Composed of Water, Methane, Carbon Dioxide, and Nitrogen
48	Dufour	France	Experimentation and Modelling of CO2 Hydrate Slurry on a Heat Exchanger for Cooling Applications
49	Dufour	France	Experimental and Numerical Studies of CO2 Hydrates as Cold Thermal Energy Storage Material in a Stirred Tank Reactor
50	He	Singapore	Molecular Dynamics Study on the Formation of Carbon Dioxide Hydrates from Two-Phase System of Water and Liquid Carbon Dioxide
51	Heeschen	Germany	Laboratory Tests on Geo-Mechanical Properties of Gas Hydrate-Bearing Sediments
52	Ho-Van	France	Experimental Study and Modelling of Cyclopentane Hydrates in the Presence of NaCl, KCl and a Mixture of Nacl - KCl
53	Holzammer	Germany	Investigation of the Influence of Thermodynamic Hydrate Inhibitors on the Development of Hydrogen Bonds in Hydrate Forming Systems by Raman Spectroscopy
54	Jean-Philippe	France	Mechanically Agitated Calorimetric Cells Working Under Pressure at Macro and Micro Scale: Application to Gas Hydrates
55	Khan	United States	Hydrate Phase Equilibria Predictions Using Electrolyte Association Equation of State (e-CPA)
56	Lee	Taiwan	Molecular Dynamics Simulation for Defect Driven Phenomena: Diffusion of Guest Molecules & CO2-CH4 Replacement in Clathrate Hydrates
57	Lei	United States	Hydrate Formation in an Unsaturated System: Impacts of Fine Particles and Water Content
58	Li	China	Multi-Scale Digital Core Analysis of Natural Gas Hydrate Bearing Sediment
59	Li	China	Numerical Simulation of Methane Plume and Inversion of Its Gas Content
60	Li	China	Experimental Measurement and Data Regression of Permeability with Methane Hydrate in Porous Media
61	Liu	United States	Molecular Simulation Study of Hydrate Formation from Methane/Ethane Mixtures
62	Luo	China	Experimental Study on the Creep Properties of CO2 Hydrate-Bearing Sediments
63	Luzi-Helbing	Germany	Investigation of Heterogeneously Composed Gas Hydrates Via Raman Mapping

64	Lv	China	Evaluation of Seawater Desalination Based on Hydrate Formation in a Novel Apparatus
65	Machida	Japan	Observation of Crystal Structure of TBAB Semiclathrate Hydrate by SEM
66	Meng	China	In-situ Raman Observation of Dissolved CH4 in Hydrate-bearing System
67	Oshima	Japan	Investigating Thermodynamic Stabilities and Crystal Systems of Ionic Mixed Semiclathrate Hydrates Formed with tetra-n-Butylammonium Bromide + tetra-n-Butylammonium Chloride
68	Osswald	France	Impact of Chemical Additives on CO2 Hydrate Formation Kinetics in a Stirred Tank Reactor
69	Peng	China	Measurements of Clathrate Hydrates by Atomic Force Microscope
70	Pinkert	Israel	Mechanical Differences Between Gas-Saturated and Water-Saturated Hydrate-Bearing Sand
71	Radhika	India	Formation Kinetics of Gas Mixtures Using Methane +Propane Hydrates in Presence of Synthetic Clay, Silica and Zeolites.
72	Rangsunvigit	Thailand	Investigation of Activated Carbon in Methyl Ester Sulfonate on Methane Hydrate Formation Kinetics
73	Rangsunvigit	Thailand	Investigation of the Effects of Waste Coffee Ground on Methane Hydrate Formation
74	Sa	South Korea	Methane and Natural Gas Hydrate Inhibition by Altering Water Structure and Cage Formation Using Amino Acids
75	Segtovich	Brazil	Non-Equilibrium Molecular Dynamics Simulations of Methane Hydrate Dissociation
76	Song	China	Investigation on Fluid Flow Behavior in Porous Media During Hydrates Dissociation Process
77	Tajima	Japan	Heat Transfer Behavior and Separation Factor Profiles During Hydrate Slurry Decomposition for Improving a Hydrate-Based Gas Separation
78	Takeya	Japan	Nondestructive Imaging of Clathrate Hydrates in an Aluminum Cell
79	Tzirakis	Denmark	Measurement and Modelling of Promoted Hydrate Systems with Application to Post-Combustion Carbon Dioxide Capture
80	Uchida	Japan	Generation of Gas Nano-Bubbles by Gas Hydrate Dissociation and Its Effect on the Memory Effect
81	Wan	China	Experimental Measurements of Thermal Conductivity of Carbon Dioxide Hydrate
82	Wang	China	Experimental Study on Methane Hydrates Formation Kinetics in Porous Media
83	Wang	China	In Situ Measurement of CH4-CO2 Hydrates Dissociation in Porous Media
84	Wang	China	Methane Hydrate Reformation in Gas/Water Excess Porous Medium
85	Wu	China	Experimental for the Influence of THF on the Hydrate Separation Effect of High Concentration CH4 Gas
86	Wu	China	Experimental Study on the Permeability of Gas Hydrates-Bearing Glass Sands
87	Yang	China	In-Situ 3D Observation of Gas Hydrate Formation/decomposition in a Sedimentary Matrix with Sub-Micron Synchrotron X-Ray Micro-CT
88	Yang	China	Experimental Research on Natural Gas Hydrate Formation in Static Case with Different Surfactant
89	Yi	China	Phase Equilbrium Data of the Tetra-n-butylphosphonium Bromide Semiclathrate Hydrates Formed with Different Gases (CO2, CH4, CO2+CH4, and CH4+N2+O2)
90	Zang	China	Gas Hydrate Formation by a Binary CO2/N2 Gas Mixture in Fine Sediments

91	Zhang	China	Formation Behaviors of CO2 Hydrate in Silica Sand and Silicon Dioxide Powders with Partially Water Saturated
92	Zhang	China	Natural Gas Supply Devices from Gas Hydrates helped with PCMs
93	Zheng	Singapore	Kinetic Evaluation of Clathrate Process for Pre-Combustion Capture in Fixed Bed Reactor Employing Cyclopentane and Cyclopentane/tetrahydrofuran Mixture as Promoter

Gas Hydrates in Nature

94	Bai	China	Geophysical Characteristics of Gas Hydrate in the Muli Area, Qinghai Province
95	Gong	China	Gas Sources of the Hydrate in Muli Permafrost of Qilian Mountain
96	Haines	United States	High-Resolution Seismic Imaging of Depositional Characteristics at Gas Hydrate Research Sites in the Gulf of Mexico
97	Han	Taiwan	Gas Hydrate System in the Passive Margin Offshore SW Taiwan
98	Hiruta	Japan	Recent Formation of Near-Seafloor Massive Gas Hydrates Estimated from Raman Spectroscopy
99	Jiapeng	China	Geological Controls on the Characteristic and Distribution of Bsr in the Shenhu Area, South China Sea
100	Jiazheng	China	Evaluation on the Source Rock of Gas Hydrate in Muli Permafrost Area, Nanqilian Basin
101	Jinqiang	China	Laboratory Quantification of Geomechanical Properties of Hydrate-Bearing Sediments in the Shenhu Area of the South China Sea at In-Situ Conditions
102	Ketzer	Brazil	Gas Hydrates Occurrences in the Rio Grande Cone, Western South Atlantic, Brazil.
103	Liu	China	Evidences of Natural Gas Hydrate in Wuli Area of Qinghai, China
104	Majumdar	United States	Gas Hydrate Volume and Distribution in the Northern Gulf of Mexico
105	McConnell	United States	Planning and Execution of Marine Methane Hydrate Pressure Coring and Site Investigation Programs
106	Myshakin	United States	Numerical Simulations of Depressurization-Induced Gas Production from an Interbedded Marine Turbidite Gas Hydrate Reservoir Model
107	Owari	Japan	High Resolution Time-Series Analysis of Interstitial Waters Using Osmosampler at Gas Venting Site in the Eastern Margin of the Japan Sea
108	Ruffine	France	Geochemistry of Gas Hydrates and Pore Waters from the Romanian Sector of the Black Sea
109	Rui	China	Research on Heat Pipe Mechanisms for Rapid Freezing Gas Hydrate Core in Bottom Hole
110	Semenova	Russian Federation	Prediction of Gas Hydrate Formation in the Shallow Arctic Seas Offshore Russia Using Measured Gas Composition
111	Shouji	China	Geological Controls of Gas Hydrate Occurrence in Qilian Mountain Permafrost, China
112	Singhroha	Norway	High-Resolution Seismic Velocity Analysis of Multicomponent OBS Data in Gas Hydrate Saturated Sediments of Vestnesa Ridge, Western Svalbard Margin
113	Sun	China	Gas Hydrate Potential in the Deepwater Area of the Southern Qiongdongnan Basin, South China Sea
114	Wei	China	Research on Numerical Simulation and Experiment of Freezing Method for Sampling Gas Hydrates
115	Wei	China	Research on Key Issues of Wire-Line Sampler for Gas Hydrate by Hole Bottom Freezing with External Cold Source

116	Yang	China	Geochemical Characteristics of Fe in Sediments in the Sea of Marmara, Turkey
117	Yoneda	Japan	Post-Cruise Analysis on Hydro-Chemo-Thermo-Mechanical Properties of Hydrate-Bearing Pressure Core Marine Sediments
118	Zhenzhou	China	Petrophysical Experiment and Core Modeling via X-CT Scanning for Gas Hydrate Reservoir in the Qilian Mountain Permafrost

WEDNESDAY, JUNE 28

07.30 - 12.00 — Colorado Ballroom A-E

Exhibits

08.30 - 10.30 — Penrose

Oral Session 6.A Gas Hydrate Related Seep Systems

Chair(s): Liu, C., Solomon, E.

1422	Phrampus	United States	Along-Strike Variation in Gas Hydrate Distribution and Instability Due to External Forcing on the Cascadia Margin
1604	Liang	China	Authigenic Carbonates from Newly Discovered Active Cold Seeps on the Northwestern Slope of the South China Sea: Constraints on Fluid Sources, Formation Environments, and Seepage Dynamics
1475	Zhuang	China	Carbon and Oxygen Isotopic Anomalies of Foraminifera Attributed to Methane Emission Events: Evidences from the Second Gas Hydrate Drilling Expedition (GMGS2) in the Northeastern South China Sea
2143	Lin	Taiwan	Gas Hydrate and Associated Cold Seep Chemosynthesis Community in the Back Arc Basin, Okinawa Trough, Northeastern Taiwan
1953	Ketzer	Brazil	Gas Hydrates and Gas Seepage in the Amazon Deep-Sea Fan
1872	Solomon	United States	Chronic Downward Flow of Seawater in Bacterial Mats at Hydrate Ridge – Mechanisms and Biogeochemical Significance

08.30 - 10.30 — Denver Ballroom 4-6

Oral Session 6.B Fundamentals: Hydrate Molecular Simulations/Modeling

Chair(s): Striola, A., Walsh, M.

1684	Kusalik	Canada	Hydrate Nucleation Phenomenology, the Importance of Microscopic Details, and Funnel-Shaped Potential Energy Landscapes
2074	Dapena	United States	Characterization of Fluid-Driven Intermittent Particle Flow at Restrictions for Early Detection of Particle Jamming in Flowlines
2179	Jimenez-Angeles	United States	Anti-Agglomeration of Clathrate Hydrates by Molecular Dynamics Simulations
2031	DeFever	United States	Understanding the Role of Surface Chemistry on Heterogeneous Nucleation of Clathrate Hydrates Using Extensive Molecular Dynamics Simulations
2054	Sveinsson	Norway	Thermally Activated Slow Crack Evolution in Single Crystal Methane Hydrates
2045	Srivastava	United States	Effect of Particle Concentration and Size Distribution on Hydrate Bedding and Plugging Mechanisms

08.30 - 10.30 — Denver Ballroom 1-3

Oral Session 6.C Flow Assurance: Hydrate Deposition Processes

Chair(s): Kaminski, R., Subramanian, S.

1794	Folgerø	Norway	Characterization of Gas Hydrate Formation and Deposition Using Dielectric Measurements
2009	Makogon	United States	Process Safety of Hydrate Deposition in Orifices During a Blowdown of Line Plugged with Hydrate
1808	Kinnari	Norway	Flow Assurance Challenges for Hydrate Deposition in Pipes with Stagnant Flow
2001	Straume	Brazil	Hydrate Deposition Studies Under Multiphase Flow Conditions
2005	Liu	United States	A Numerical Method to Quantify Hydrate Deposition in Subsea Gas Pipelines During Depressurization
1875	Di Lorenzo	Australia	Experiments and Modelling of Hydrate Deposition in Gas-Dominated Pipelines

10.30 - 11.00 — Colorado Ballroom A-E

Break (Refreshments are available)

11.00 - 17.30 — Off-Site

Group Tour Departure (see program for details)

THURSDAY, JUNE 29

07.30 - 17.00 — Colorado Ballroom A-E

Exhibits

08.30 - 10.30 — Penrose

Oral Session 7.A Frontier Gas Hydrate Systems

Chair(s): Chopra, K., Lin, S.

1737	Haeckel	Germany	The Gas Hydrate System of the Danube Deep-Sea Fan in the Black Sea
2087	Liu	Taiwan	Seismic Characteristics of Fluid-Related Features in Various Gas Hydrate Systems Offshore Taiwan
1934	Gassner	Germany	Seismic Characterization of Submarine Gas Hydrate Deposits in the Western Black Sea by Acoustic 2D Full-Waveform Inversion
1798	Roy	Ireland	Natural Gas Hydrates and Fluid Flow: Implications from Irish Offshore
2155	Lu	China	Gas Hydrate and Oil & Gas System in the Qilian Mountain Permafrost
1819	Matveeva	Russian Federation	Indications of Gas Hydrate Presence Within Phu Khanh, Nam Con Son, and Tu Chinh-Vung May Basins in the South China Sea Offshore Vietnam

08.30 - 10.30 Denver Ballroom 4-6

Oral Session 7.B Gas Hydrate Field Research Technologies

Chair(s): Schultheiss, P., Wu, N.

2175	Schultheiss	United Kingdom	Advances in Wireline Pressure Coring, Core Handling, and Core Analysis Related to Gas Hydrate Drilling Investigations
1907	Dai	United States	What Has Been Learned from Pressure Cores
1841	Frank	Germany	Integrated Baseline and Production Monitoring in Methane Hydrate Fields
2004	Scherwath	Canada	Continuous Long-Term Gas Hydrate Monitoring at Northern Cascadia Using Ocean Networks Canada's Neptune Observatory
1911	Fang	China	Raman Spectroscopic Characteristics of Massive Gas Hydrate Recovered from the Haima Cold-Seep Field in the Western of Shenhu Sea Area, South China Sea
1519	Kanno	Japan	Development and Implementation of In-Situ Pressure Measurement for the Second Methane Hydrate Offshore Production Test in the Eastern Nankai Trough

08.30 - 10.30 Denver Ballroom 1-3

Oral Session 7.C Flow Assurance: Hydrate Field Management

Chair(s): Li, Q., Zerpa, L.

1599	Bhatnagar	United States	Advanced Hydrate Management Strategies in Deepwater Production Systems
2077	Zhao	China	A Preliminary Study of Early Detection of Hydrate Blockage in Subsea Gas Pipelines
1806	Li	Norway	Breakthrough Discovery of an Environmentally Acceptable Anti-Agglomerant for Norwegian Continental Shelf
1673	Salmin	United States	The Hydrate Plugging Tendency of Hydrate Plug Resistant Oils Under-Dosed with Methanol Using High Pressure Transparent Rocking Cells
1532	Jones	United States	Reduction in Methanol Volume Requirements for Hydrate Management with KHI in Deepwater Gulf of Mexico Gas Condensate Well
1406	Song	China	Investigation on Hydrate Plugging in Natural Gas + Diesel Oil + Water Systems Using a High-Pressure Flow Loop

10.30 - 10.45 Colorado Ballroom A-E

Break (Refreshments are available)

10.45 - 12.30 Colorado Ballroom A-E

Poster Session 3 - poster presentations listed below

12.30 - 13.30 Colorado Ballroom F-J

Lunch

13.30 - 15.30 Penrose

Oral Session 8.A Nankai Trough and Gulf of Mexico Gas Hydrate Systems

Chair(s): Flemings, P., Fujii, T.

1800	Fujii	Japan	The Selection of the Candidate Location for the Second Offshore Methane Hydrate Production Test and Geological Findings from the Pre-Drilling Operation, in the Eastern Nankai Trough, Japan
1932	Tamaki	Japan	Integrated Reservoir Characterization and 3D Geological Modeling for the Gas Hydrate Potential Evaluation at the 2nd Offshore Production Test Site in the Eastern Nankai Trough, Japan
1755	Suzuki	Japan	Lithological Interpretation for Constructing the Geological Model Around Wells for the 2nd Offshore Gas-Production Test from Gas Hydrate on the Daini-Atsumi Knoll in Eastern Nankai Trough Area
2177	Flemings	United States	GOM^2: Prospecting, Drilling and Sampling Coarse-Grained Hydrate Reservoirs in the Deepwater Gulf of Mexico.
1750	Burwicz	Germany	Frontiers of 3D Basin-Scale Modeling of Natural Gas Hydrate Systems
1976	Boswell	United States	The Increasingly Complex Challenge of Gas Hydrate Reservoir Simulation

13.30 - 15.30 Denver Ballroom 4-6

Oral Session 8.B Physical Properties of Hydrate-Bearing Sediments

Chair(s): Daigle, H., Waite, W.

1732	Konno	Japan	Current Perspective on Permeability of Gas-Hydrate-Bearing Marine Sediments
2167	Kang	South Korea	Correlation between Gas Hydrate Saturation and Water Permeability of Hydrate-Bearing Sediments in the Ulleung Basin of Korea
1846	Ning	China	Study on the Relative Permeability of Hydrate-Bearing Sediments by a Fractal Parallel Capillary Model
1991	Okwananke	United Kingdom	Experimental Study of Gas Permeation Through Gas Hydrate-Bearing Sediments
2188	Priest	Canada	Strength Comparisons of Laboratory Synthesized Hydrate-Bearing Sand and Its Relationship to Natural Sediments
1791	Yang	China	An Introduction of a New Instrument for Measurement on Geophysical and Mechanical Properties of Gas Hydrate-Bearing Unconsolidated Sediments

13.30 - 15.30 Denver Ballroom 1-3

Oral Session 8.C Fundamentals: Hydrate Interfacial Phenomena

Chair(s): Aman, Z., Chen, G.

1793	Zhang	China	Investigation into Relationship Between Hydrate Particles and Hydrophobic Surface
1747	Hajiw	France	Impact of Aromatic Compounds on Acid Gas Injection: Experimental Measurements and Predictions with the GC-PR-CPA Equation of State
1925	Falenty	Germany	Gas Hydrate Decomposition Processes in Sedimentary Matrices Studied by Synchrotron X-Ray Computed Micro-Tomography
1417	He	Singapore	Effects of Silica and Graphite Surfaces on the Formation of CH4 Hydrates: a Molecular Simulation Study

1545	Takeya	Japan	An Observation of Methane Hydrate Using Terahertz Time Domain Spectroscopy
1605	Kamada	Japan	Pore-Scale Numerical Simulation of Formation of Methane and CO2 Hydrates

15.30 - 15.45 Colorado Ballroom A-E

Break (Refreshments are available)

15.45 - 17.30 Colorado Ballroom A-E

Poster Session 3 Continued - poster presentations listed below

19.30 - 22.30 Colorado Ballroom F-J

Banquet and Awards Presentation

Posters for Thursday, June 29

Climate Change and Geohazards

1	Laier	Denmark	Gas Migration Through a 150 m Hydrate Stability Zone Off Svalbard Results in Local Shallow Secondary Hydrate Formation

Energy Recovery

2	Gupta	Germany	Large-Deformation Poro-Elastoplastic Model for Lab-Scale Methane Hydrate Systems
3	Janicki	Germany	Numerical Simulation of Gas Hydrate Exploitation from Subsea Reservoirs in the Black Sea
4	Kan	China	Numerical Simulation of Gas Production from Low-Permeability Gas Hydrate Deposits with Vertical-Horizontal Well Pattern
5	Lee	South Korea	Numerical Simulation of Dissociation Behavior in Gas Hydrate Experimental Production System Using Depressurization Method
6	Legoix	Germany	High-Pressure Flow-Through Experiments on CH4 Production from Gas Hydrate-Bearing Sediments Through Injection of CO2 and N2:CO2 : Effects from Increased CH4 Load in the Migrating Fluid
7	Mu	Denmark	Methane Production and Carbon Capture by Hydrate Swapping
8	Nair	India	Methane Gas Production by Constant Rate Depressurization from Clayey Hydrate Reservoir
9	Oluwunmi	New Zealand	Numerical Simulation of Methane Production from a Submerged Gas Hydrate Reservoir in the Hikurangi Margin East of New Zealand.
10	Rui	China	Simulation and experimental study on spiral-plate heat exchanger of drilling fluid cooling system
11	Seo	South Korea	Structural and Spectroscopic Identifications of C3H8+CH4 Hydrate Using CO2/N2 Gas Mixture
12	Wang	China	Gas Production from Methane Hydrate Deposits Induced by Concentrated Seawater Injection
13	Wang	China	Natural Gas Hydrate Exploitation Through Depressurization and Inhibitor Injection Method

14	Yin	Singapore	Methane-Water Two-Phase Flow Transition Study in a Vertical Well During Methane Hydrate Dissociation by Depressurization and Thermal Stimulation
15	Zheng	China	Investigation on the Boundaries Among Different Controlling Mechanisms of Hydrate Exploitation

Flow Assurance

16	Akhfash	Australia	Microscale Detection of Hydrate Blockage Onset in Gas-Water Systems
17	Brown	United States	Micromechanical Force Measurements as a Quantitative Tool to Rank Industrial Anti-Agglomerant Chemicals
18	Charlton	United States	Oil- and Water-Continuous Hydrate Formation Experiments in a Lab-Scale Vertical Flowloop
19	Ding	China	Option Design of Hydrate Prevention for High Pressure Gas/Condensate/ Water Gathering Pipeline in a Condensate Oilfield
20	Fuji	Japan	Numerical Simulations of Rising Bubbles Covered with Methane Hydrate Membrane Within Pipes
21	Guembaroski	Brazil	Phase Equilibria of Carbon Dioxide Hydrates in Ethanol and Sodium Chloride Aqueous Solutions
22	Gupta	India	Non-Isothermal Kinetics of Methane Hydrate Formation in Aromatic Based Ionic Liquids: Effect of Carbon Chain Length
23	Keinath	United States	Investigation of Effective Viscosity of Hydrate Slurries in Crude Oils and the Impact of Low Dose Inhibitors
24	Lee	United States	Phase Behavior and Kinetics for Gas Hydrates Formed from High Salinity Brines up to 200 MPa
25	Liu	China	Quantification of Water Droplet Size Distribution in Water-in-oil Emulsion and Its Influence on Hydrates Formation
26	Qin	United States	Investigations of a Hydrate Deposition Mechanism in Multiphase Flow Conditions Using a High Pressure Lab-Scale Loop
27	Sa	United States	Permittivity Sensors for Detection and Characterization of Hydrate Deposits on Pipe Walls
28	Salmin	United States	Investigation of Emulsion Behavior at Hydrate Onset in a High Pressure Stirred Autoclave
29	Seo	South Korea	Inhibition Performance of Low Dosage Hydrate Inhibitors According to Changing Molecular Weight on Methane Hydrate
30	Seo	South Korea	Performance of Cpc as Anti-Agglomerant for Cold Restart Operation
31	Wang	United States	Numerical Transient Simulation Study of a Real Subsea Tieback System with Anti-Agglomerants Using the CSMHyK Hydrate Formation Model
32	Wang	China	Investigating the Interfacial and Physical Properties of Hydrate Anti-Agglomerant Systems
33	Wei	China	Study of Multiphase Flow in Annulus During Marine Natural Gas Hydrate Reservoir Drilling
34	Wise	United Kingdom	Phase Behaviour of Methane in Methanol, Ethanol and Aqueous Solutions
35	Xu	China	New Insights into the Effect of Pectin Concentration on Crystal Growth Inhibition Region
36	Yanez	Venezuela (Bolivarian Republic of)	Potential Inhibition Behavior by Some Pectin's Fruit on THF Hydrate Formation.

Gas Hydrate Fundamentals

37	Beeskow-Strauch	Germany	The THF-Water System: Incomplete Hydrate Formation from a Calorimetric Point of View
38	Bian	United Kingdom	Raman-Imaged CO2-CH4 Hydrate Exchange in Microscopic and Macroscopic Systems
39	Biswas	India	Rapid Methane Gas Uptake in Tetrahydrofuran Hydrates: Optimization of Solution in Laboratory Scale Reactors for as Storage Application
40	Brumby	Japan	Simulations of Gas Hydrates by Gibbs Ensemble Monte Carlo Method with Partial Separation
41	Cao	China	Molecular Insights into Mechanical Strength of Polycrystalline Water Ice Containing Methane Hydrate Grains
42	Chari	India	Methane Gas Release from Hydrates Under Water Optimized Conditions in Low Density Hollow Silica
43	Chazallon	France	Raman Quantification of the Separation Bewteen CO2 and N2 in Clathrate Hydrates: Application to CO2 Capture from Gas Mixtures
44	Chazallon	France	Selectivity in Semi-Clathrates of TBAB Probed by Raman Spectroscopy: CO2 Capture from CO2-N2 Gas Mixtures
45	Choi	United States	Laboratory Studies on Geomechanical Behavior of Hydrate-Bearing Sediments During Dissociation
46	Dai	United States	Relative Water and Gas Permeability – from Capillary Tube Models to Pore Networks
47	Di Profio	Italy	Separation of CO2 and CH4 from Biogas by Formation of Clathrate Hydrates: Importance of the Driving Force
48	Eastman	United States	Surfactant Enhanced Methane Hydrate Growth in Quiescent Sodium Chloride Solutions
49	Istomin	Russian Federation	Kinetic and Morphology of Methane Hydrate Formation in MEG Solutions
50	Istomin	Russian Federation	Kinetics and Thermodynamics of Gas Hydrate Formation in CaCl2, MgCl2 and NaCl Aqueous Solutions
51	Kajiyama	Japan	The Effect of Particle Characteristics on Shear Behaviour of Methane Hydrate-Bearing Materials in Triaxial Compression Tests
52	Khurana	Singapore	Process Evaluation of Pre-Combustion CO2 Capture from Fuel Gas Using Gas Hydrates
53	Kida	Japan	Structural Properties of Multi-Component Gas Hydrates Containing Hydrocarbons
54	Kim	South Korea	Thermodynamic and Spectroscopic Characteristics of F-Gas (CHF3 and C2F6) + N2 Hydrates for Their Potential Use in F-Gas Separation
55	Kim	United States	Rigorous Simulation of Coupled Non-Isothermal Flow and Largely Deformable Geomechanics for Gas Hydrate Deposits
56	Komatsu	Japan	Relationship Between Gas Uptake Behavior and Solid Fraction in Semi-Clathrate Hydrate Slurry Under CO2 Atmosphere
57	Kumar	Singapore	Study of Tetrahydrofuran -Methane Mixed Hydrates Using High Pressure Differential Scanning Calorimetry
58	Kumar	Singapore	Study of Mixed Methane/Tetrahydrofuran Hydrates in Saline Water: Application to Methane Gas Storage & Transportation
59	Liu	China	Rapid Synthesis Device and Process Design for Natural Gas Hydrate
60	Lizhi	China	Prediction of the Phase Equilibria of Nitrogen Hydrates: A Molecular Dynamics Simulation Study
61	Ma	China	Study on Hydrate-Based Desalination Technology in Water-In-Oil Emulsion

62	Maghsoodloo	France	Influence of the Crystallization Rate on the Mixed Hydrate: Experimental and Modelling Work
63	Marin-Sandoval	Canada	Phase Equilibrium and Liquid Mole Fraction Measurements of Tetra-n-Butylammonium Chloride + CO2/CH4 Semi-Clathrates.
64	Nakhaee	Iran	Prediction of Natural Gas Hydrates Dissociation Enthalpies from Phase Equilibrium Data
65	Pelletier	Canada	Plasma Deposited Organic Coating for Reduced Tetrahydrofuran Hydrate Adhesion
66	Podenko	Russian Federation	Stability of Metastable Dry Water Methane Hydrate Below 273K
67	Qingguo	China	The Powder X-Ray Diffraction Patterns of Some Typical Gas Hydrates
68	Ranieri	Switzerland	Structural Changes in Hydrogen Hydrate in the GPa Pressure Range
69	Reshetnikov	Russian Federation	The Influence of Water Saturation and Fractional Composition of Quartz Sand on the Decomposition of Hydrates of Natural Gas at Different Pressures and a Temperature of 268K
70	Stanwix	Australia	Quantifying the Effect of Thermal Stimulation on CH4-CO2 Exchange in Unconsolidated Hydrate Sediments
71	Stoporev	Russian Federation	Role of the Interphase Boundary in Nucleation Process of Methane Hydrate in Water-In-Oil Emulsions
72	Sun	Canada	Progress Towards the Application of Gas Hydrate Technology for CO2 Capture and Storage
73	Tanaka	Japan	Numerical Study on Methane Hydrate Crystallization in a Stirred Tank Reactor
74	Thrane	United States	Probing Molecular Dynamics During Hydrate Formation by High Field NMR Relaxometry and Diffusometry
75	Tumba	South Africa	Prospects of Using Gas Hydrate-Based Separation Processes in Inorganic Fertilizer Plants: Insights from Literature Phase Equilibrium Data
76	Uchida	United States	Micromechanical Investigation of Sand Production in Gas Hydrate-Bearing Sediments
77	Vasic	Canada	Structure II Gas Hydrate Mechanical Properties and Guest-Host Interactions using Density Functional Theory
78	Ward	United States	Phase Equilibria Modeling of CO2 and H2S Gas Hydrate Systems: Optimization of Kihara Parameters
79	Wei	China	Incipient Hydrate Phase Equilibrium of Two High Co2 Content Containing Natural Gases in Groundwater
80	Wei	China	Study of Structure I Methane Hydrate Decomposition by Multi-Node Molecular Dynamic Simulation
81	Xia	China	Properly Temperature Arising Promote Reformation When Gas Hydrate Formation Stagnated Due to the Agglomeration
82	Xiao	China	Study of Decreasing the Decomposition Rate of Methane Hydrates by Flash of Liquid Propane
83	Xu	China	Research on Selectivity of Hydrate Additives on Gases
84	Yu	China	The Dissociation Characteristics of Gas Hydrates under Low Temperature
85	Zhang	China	The Correlation Among the Thermal Conductivity, the Rheological Property and the Mesostructure of Water-Based Drilling Fluids
86	Zhang	China	Study on Acoustic Properties of Multi-type Natural Gas Hydrate-Bearing Sediments
87	Zheng	Singapore	Systematic Evaluation of Semiclathrate-Based Pre-Combustion CO2 Capture in Presence of Tetra-N-Butylammonium Fluoride (TBAF): Effect of TBAF Concentration and Kinetic Additives

88	Aung	Japan	Investigation of Gas Hydrate Petroleum System in the Pleistocene Sedimentary Formations along the eastern Nankai Trough: Regional to Mega-scale Modeling
89	Chen	Taiwan	Joint Geophysical Data Interpretation on Gas Hydrate System Offshore Southwestern Taiwan
90	Cook	United States	Phase Reversals in Sand-Rich Gas Hydrate Systems
91	Ebinuma	Japan	In Situ Piezocone Penetration Tests Accompanied by Laboratory Strength Measurements at Shallow Gas Hydrate Exploration Sites
92	Guan	China	The Formation and Accumulation Process of Methane Hydrate-Bearing Sediments in Shenhu Area of Northern South China Sea
93	Kang	South Korea	Review of the Gas and Gas Hydrate Indicators in Seismic Profiles Based on Drilling Result from the Ulleung Basin, East Sea
94	Kang	South Korea	Occurrence of Seismic Chimneys Associated with Gas Hydrate in the Ulleung Basin, East Sea, Korea
95	Lai	Taiwan	Microbial Diversity of Deep Sea Gas Hydrate and Methane Seep Offshore SW Taiwan
96	Liao	China	Why Gas Hydrate Occurred Over Topographic Highs in Shenhu Area in the Northern South China Sea
97	Malinverno	United States	Modeling Discrete Intervals of Methane Hydrate-Filled Veins in Fine-Grained Continental Margin Sediments
98	Park	South Korea	In Situ and Laboratory Velocity of Seafloor Sediments in Gas Hydrate Chimney Structure in the Ulleung Basin, East Sea
99	Pin	China	Intra-Slope Mud Volcanoes in the Dongsha Waters, the South China Sea
100	Rodrigues	Brazil	Origin of Organic Matter in Hydrate-Bearing Sediments of the Rio Grande Cone: Evidence from TOC, TN, δ13C and 14C Isotopes
101	Senger	Norway	Integrated Thermo-Baric Modelling of the Hydrate Stability Zone Onshore Svalbard, Arctic Norway
102	Snyder	Japan	Noble Gas and Stable Isotopic Composition of Methane Hydrates in Umitaka Spur: Three End-Member Mixing and Elemental Fractionation
103	Song	Italy	Wave Equation Datuming Applied to Seismic Data to Image Gas Hydrate System
104	Uchida	Japan	Sedimentary Environment and Early Diagenesis of Muddy and Sandy Sediments Hosting Massive Gas Hydrate Below Sea Floor in the Eastern Margin of Japan Sea
105	VanderBeek	United States	On the Importance of Advective Versus Diffusive Transport in Controlling the Distribution of Methane Hydrate in Heterogeneous Marine Sediments
106	Wang	China	Rare Earth Elements in Cold Seep Carbonates from the Southwestern Dongsha Area, Northern South China Sea and Gulf of Cadiz
107	Wang	China	The Impact of Fluid Advection and Migrating Canyons on Gas Hydrate Distribution in the Pearl River Mouth Basin, South China Sea
108	Wei	United States	Methane Migration and Gas Hydrate Occurrence in a 2.5 m Sand in the Terrebonne Basin, Gulf of Mexico.
109	Yang	Germany	Quantification of the H2S-Content Encaged in Natural Marine Gas Hydrates Using Raman Spectroscopy
110	Yoo	South Korea	Spatial Distribution of Gas Hydrate and Free Gas by Using Seismic Attribute Analysis in the Northwest Ulleung Basin, East Sea: Insights Their Link with the Gas Migration
111	Zhibin	China	Joint PP and PS Inversion of OBN Data for the Elastic Property of Gas Hydrates, a Case Study in the South China Sea

FRIDAY, JUNE 30

07.30 - 15.00 — Colorado Ballroom A-E

Exhibits

08.30 - 10.30 — Penrose

Oral Session 9.A Sea of Japan Gas Hydrate Systems

Chair(s): Boswell, R., Matsumoto, R.

2028	Oi	Japan	Types of Gas Chimney Structures in Southeastern Parts of the Sea of Japan
1905	Ohkawa	Japan	Characterization of Gas Chimney Systems in Joetsu Area, Eastern Margin of the Sea of Japan, Using High-Resolution 3-Dimensional (HR3D) Seismic Data
1636	Tanahashi	Japan	Physical Properties Obtained by LWD for Thick, Massive Gas Hydrate in the Offshore-Joetsu Area, Eastern Margin of Japan Sea.
1689	Kakuwa	Japan	Occurrence of Methane Hydrate in Joetsu Area, the Eastern Margin of Japan Sea
1478	Tomaru	Japan	Relationship Between Pore Water Anomalies and Seafloor Topography Constrained by the Development of Shallow Gas Hydrates in the Japan Sea
1915	Snyder	Japan	Mineralization of Dolomite Associated with Gas Hydrate Formation in Sea of Japan Sediments.

08.30 - 10.30 — Denver Ballroom 4-6

Oral Session 9.B Gas Hydrate Production Geomechanical Behavior

Chair(s): Priest, J., Reagan, M.

1640	Murphy	United Kingdom	A Laboratory Investigation of Sand Production Simulating the 2013 Daini-Atsumi Knoll Gas Hydrate Production Trial Using a High Pressure Plane Strain Testing Apparatus
1901	Hyodo	Japan	Global and Local Deformation of Methane Hydrate Bearing Sands with Various Fines Content During Depressurization for Gas Production
1704	Lee	South Korea	Monitoring Pore Volume Changes in GH-Bearing Sediments During Hydrate Dissociations
1562	Xu	China	Geomechanical Response of Gas Hydrate Exploitation in an Unconfined Marine Sediment
1860	Uchida	United States	Numerical Simulations of Sand Production in Interbedded Hydrate-Bearing Sediments During Depressurization
1837	Deusner	Germany	Mechanical Behavior of Gas Hydrate-Bearing Sediments: Effects from Dynamic Changes in Gas Hydrate Saturations, Non-Homogeneous Gas Hydrate Distributions and Two-Phase Fluid Flow

08.30 - 10.30 — Denver Ballroom 1-3

Oral Session 9.C Fundamentals: Hydrate Kinetic Processes

Chair(s): Englezos, P., Makogon, T.

1743	Borosa	Germany	Investigation of Mass Transport and Crystallization Processes of Acoustically Levitated Droplets Under Elevated Pressures

1822	Kuhs	Germany	The Role of Nanobubbles in Gas Hydrate Formation and Decomposition Processes
1504	Falenty	Germany	The Fast Formation of Ne-, He- and D2-hydrates via a High Pressure Route
1758	Kang	South Korea	Fast Methane Hydrate Formation Using Heavy Guest Compounds as a Kinetic Hydrate Promoter in Non-Stirred System
1948	Boufares	France	Effect of Additives on the Kinetic Study of CO2 Hydrates During Crystallization for Secondary Refrigeration Applications Using FTIR/ATR Spectroscopy
2227	Desmedt	France	Playing with the acidity of the host cages for improving gas insertion in clathrate hydrates.

10.30 - 10.45 — Colorado Ballroom A-E

Break (Refreshments are available)

10.45 - 12.30 — Colorado Ballroom A-E

Poster Session 4 - poster presentations listed below

12.30 - 13.30 — Colorado Ballroom F-J

Lunch

13.30 - 15.30 — Penrose

Oral Session 10.A South China Sea Gas Hydrate Systems

Chair(s): McConnell, D., Qian, J.

1438	Wu	China	Migration and Accumulation System: Key Control Factors of Gas Hydrate Formation and Distribution in the Northern South China Sea
2160	Lu	China	Geophysical and Geotechnical Properties of Shallow Sediments in the Northern Slope of South China Sea
1425	Su	China	Two Different Types of Fine-Grained Turbidites Associated with Gas Hydrates in the Shenhu Area, Northern Continental Slope of the South China Sea
1922	Hu	China	Influence of Foraminifera on Hydrate Formation and Its Acoustic Responses in the Fine-Grained Sediments from the Shenhu Area, South China Sea
1610	Qian	China	Seismic Characteristics and Quantitative Interpretation of Gas Hydrate Reservoirs in the Shenhu Area, South China Sea

13.30 - 15.30 — Denver Ballroom 4-6

Oral Session 10.B Gas Hydrate Production Geomechanical Modeling

Chair(s): Dai, S., Seol, Y.

1842	Sun	China	Production Potential and Stability of Hydrate-Bearing Sediments at the Site Gmgs3-W19 in the South China Sea: a Preliminary Feasibility Study
2257	Moridis	United States	The T+H+M Code for the Analysis of Coupled Flow, Thermal, Chemical and Geomechanical Processes in Hydrate-Bearing Geologic Media

2182	Ning	China	Prediction of Sand Production in Gas Recovery from the Shenhu Hydrate Reservoir by Depressurization
1999	Gai	United States	A Constitutive Mechanical Model for Gas Hydrate Bearing Sediment
1591	Liu	China	A Damage-Softening Statistical Constitutive Model of Composite Hydrate-Bearing Sediments
1559	Too	Singapore	Hydraulic Fracturing of High Saturation Hydrate-Bearing Sand

13.30 - 15.30 — Denver Ballroom 1-3

Oral Session 10.C Fundamentals: Hydrate Nucleation and Growth Processes

Chair(s): Lee, J., Wu, D.

2037	Majid	United States	The Study of Hydrate Particle Agglomeration by Viscosity Measurements
1577	Lauricella	Italy	Methane-Hydrate Nucleation in Marine Environments: Insights from Molecular-Dynamics Strategies Exploring Free-Energy Landscapes
1807	Park	South Korea	Temperature-Sensitive Release of Encapsulants in Microcapsules Using Hydrate Formation
1550	Veluswamy	Singapore	A Simple Combinatorial Approach to Reduce Nucleation Stochasticity and Enhance Methane Hydrate Growth Using Amino Acids
2260	Ning	China	The Effect of Hydrophobic and Hydrophilic Nanoparticles on Methane Hydrate Formation
2012	Hobeika	France	Hydrate Formation in or near Water on a Substrate: Insights from High Resolution Optical Microscopy

15.30 - 15.45 — Colorado Ballroom A-E

Break (Refreshments are available)

15.45 - 16.30 — Colorado Ballroom A-E

Poster Session 4 Continued - poster presentations listed below

16.30 - 17.00 — Denver Ballroom

Conference Closing Remarks

17.00 - 17.15 — Denver Ballroom

Conference Adjourns

Posters for Friday, June 30

Climate Change and Geohazards

1	Katou	Japan	Numerical Simulation of Deformation for Methane Hydrate-Bearing Sediment During Mh Dissociation Under Plane Strain Stress Condition

Energy Recovery

2	Gil	South Korea	Sensitivity Analysis of Sediment Properties in Numerical Simulation of Gas Hydrate Experimental Production System
3	Li	China	Numerical Simulation on the Perforation Optimization of Class 2 Hydrate Reservoir
4	Lu	China	Tri-Axial Tests on Artificial Water-Saturated Hydrate Bearing Sediments from South China Sea
5	Max	United States	Technology and a Seafloor Industrial Site Approach to Natural Gas Hydrate Exploration and Production
6	Morita	Japan	The Thermophysical Properties Measurement of Natural Methane Hydrate Bearing with Vertical Effective Vertical Stress
7	Spangenberg	Germany	Seismic Wave Tomography to Monitor Hydrate Formation and Production Experiments in LARS
8	Sun	China	One-Dimensional Study on the Effect of Permeable Overburden on Gas Production from Hydrate Deposit
9	Sun	China	Phase Equilibria of CH4+N2+CO2 Hydrates and Its Implication for CH4 Recovery by CO2+N2 Replacement
10	Teng	China	The Influence of Percolation Zone on Gas Production in Gas Hydrate Reservoirs
11	Wang	China	Production Behaviors in Natural Gas Hydrate Reservoir: From Large Scale Experimental Test to Field Test
12	Wang	Japan	Review of In-Situ Monitoring Data from Cement Heat of Hydration for the First and Second Offshore MH Production Test in the Eastern Nankai Trough, Japan
13	Zhang	China	Experimental Study of the Effect of Pore Size on the Storage Process of Carbon Dioxide Hydrate in Porous Media

Flow Assurance

14	Abidin	Australia	Synergistic Hydrate Inhibition in Crude Oil Systems Studied with Differential Scanning Calorimetry
15	Arjmandi	Australia	Synergistic Hydrate Inhibition with MDEA for Reduced MEG Circulation
16	Bostelmann	Brazil	Ultrasonic Instrumentation for Characterization of the Process of Hydrate Formation
17	Charin	United States	Steady-State and Transient Studies of Gas Hydrates Formation in Non-Emulsifying Oil Systems
18	Hu	United States	Rocking Cell Tests for Hydrate Formation, Bedding and Deposition in the Presence of Anti-Agglomerants and Salts
19	Jeong	Australia	Raman Spectroscopic Studies of Surfactant Adsorption at Hydrate, Oil and Water Interfaces
20	Kwak	South Korea	Quantifying the Risk for Hydrate Formation from Subcooling and Growth Rate
21	Lim	Australia	Quantitative Characterization of the Hydrate Memory Effect in High-Pressure Gas-Water Systems
22	Lucente-Schultz	United States	Subcooling Effects on the Performance of Anti-Agglomerant Low Dose Hydrate Inhibitors (AA-LDHIs)
23	Mady	Egypt	Synergism of t-Heptylated and Other Quaternary Ammonium Salts with Polyvinylcaprolactam Kinetic Hydrate Inhibitor in High Pressure and Oil-Based Systems
24	Morrissy	Australia	Visual Measurements of Cyclopentane Hydrate Film Growth Rate in the Presence of Surfactants and Crude Oil Fractions

25	Norris	Australia	Probabilistic Assessment of Hydrate Blockage Risk in Oil and Gas Flowlines
26	Rosas	Brazil	Understanding Hydrate Slurry Flow Through Solid-Liquid-Gas Slug Flow in Horizontal Pipes
27	Song	China	The Studies on Morphology and Kinetics of Natural Gas Hydrates Dissociation in a High Pressure Flow System
28	Srivastava	United States	Water Droplet Size Measurements and Modeling for Partially Dispersed Systems Using a High Pressure Industrial-Scale Flowloop
29	Walsh	United States	Thermodynamic Hydrate Inhibition Performance of Choline Isobutyrate, an Environmentally-Benign Ionic Liquid
30	Wang	China	Study on the Depositing Characteristics of Natural Gas Hydrate Particles in Multiphase Pipeline

Gas Hydrate Fundamentals

31	Cha	South Korea	Thermodynamic Stability and Spectroscopic Identification of Binary Clathrate Hydrates including Unsaturated Aldehyde and Gaseous Guests
32	Chaouachi	Germany	The Importance of Crystallite Size Distributions in Gas Hydrate Research
33	Chu	Taiwan	Using Ethanol as a Kinetic Promoter for Methane Hydrate Formation and Dissociation via Ice Seed Method
34	Desplanche	France	Investigation of a Strong Acid Clathrate Hydrate by Raman Spectroscopy: Toward Fuel Cell Application
35	Istomin	Russian Federation	Thermodymanic Study of Residual Water Content in Sediments in Equilibrium with Gas Hydrates
36	Kezirian	United States	Utilizing Natural Gas Hydrates for Safe, Sustainable and Economical Storage from Offshore Petroleum Reserves
37	Kim	United States	Waves in THF Hydrate-Bearing Sands
38	Liu	China	Triaxial Shear Tests on Synthetic Methane-Hydrate-Bearing Sands Using the Time Domain Reflectometry Technique to Determine Hydrate Saturation
39	Menezes	Brazil	Thermodynamic Properties of Methane Hydrates by High Pressure Differential Scanning Calorimetry
40	Petuya	France	Raman Evidence of the Type of Occupied Cages in CO2, N2/ and CO2 Clathrate Hydrates
41	Priest	Canada	The Behavior of Fine-Grained Sediments Containing THF Hydrate Veins During Triaxial Compression Tests.
42	Rydzy	United States	Understanding Seismic and Petrophysical Indications of Pure Hydrates and Hydrate-Bearing Sediments
43	Shi	China	Thermodynamic Modeling of Phase Equilibria of Semiclathrate Hydrates Formed with Tetrabutylphosphonium Bromide (TBPB) Plus CH4, CO2 or N2
44	Silva	France	Use of the Thermodynamic Promoter TBAB in Synergy with Kinetic Promoters to Improve the Separation of CO2 + CH4 Gas Mixture by Clathrate Hydrate Formation
45	Touil	France	Videomicroscopy and Spectroscopic Studies of Gas Hydrates in Silica Microcapillaries
46	Xiaobing	China	Theoretical Analysis of the Dissociation of Gas Hydrate in Sediment
47	Yan	China	Study on the Inhibition Performance of a New Kind of Hydrate Inhibitor
48	Yang	United States	Thermal Properties Measurements for Hydrate-Bearing Sediment Using Single-Sided Heat Source
49	Yanlong	China	Triaxial Shearing Behaviors of Hydrate-Bearing Intermediate Fine Sediment
50	Zhang	China	Study on the Influence of Driving Force to Gas Hydration Separation Effect

51	Zheng	China	The Development and Application of Gas Hydrate Based Technology on Seawater Desalination: a Review

Gas Hydrates in Nature

52	Aoyama	Japan	A Novel Method to Explore Submarine Gas Resources from Plumes Originating from Seafloor Surface And/or Shallow Subsurface Methane Hydrates
53	Dannowski	Germany	Shear Wave Modelling of High Resolution OBS Data with a Comparison to CSEM Data in a Gas Hydrate Environment in the Danube Deep-Sea Fan, Black Sea
54	Huang	Taiwan	The Gas Hydrate Master Program of National Energy Program-Phase II in Taiwan
55	Kroeger	New Zealand	The Interplay of Microbial and Thermal Gas Generation and Impact on Hydrate Formation Mechanisms: Examples from Modelling Hydrate Formation in New Zealand in Different Settings
56	Liu	China	The Difference in Foraminifera Occurrence Between Western High and East Basin in the Sea of Marmara
57	Makogon	United States	To a Question About the “Mysterious” Rock Ejection in the Subarctic
58	Nole	United States	The Impact of Heterogeneous Lithology on Gas Hydrate Accumulations in Marine Sediments
59	Oi	Japan	Sedimentation Ages from the Hydrate–bearing Cores in Eastern Parts of the Sea of Japan
60	Runyan	United States	Seismic Investigations of Gas and Gas Hydrate Offshore Northwestern Australia
61	Spangenberg	Germany	Seismic Velocities and Electrical Resistivities of Ice-Bearing Sediments-Ice as Hydrate Equivalent in Sandy Sediments
62	Xia	China	Study on Genetic-Type and Its Significance of Hydrocarbon Gases from Permafrost-Associated Gas Hydrate in Qilian Mountain