# 4<sup>th</sup> International Acid Gas Injection Symposium

September 24 - September 27, 2013 Coast Plaza Hotel & Conference Center, Calgary, Alberta, Canada



1

KEYNOTE SPEAKER LEN HECKEL BUSINESS OPPORTUNITY MANAGER SHELL QUEST CANADA



### What is AGIS?

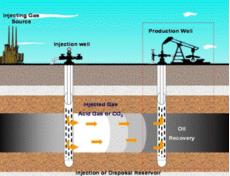
#### AGIS-IV September 24<sup>th</sup> to 27<sup>th</sup>, 2013

The Coast Plaza Hotel & Conference Center, Calgary 1316 33<sup>rd</sup> Street NE, Calgary, Alberta, Canada T2A 6B6

The world's thirst for energy continues to increase especially now as the world population exceeds 7 billion. Producers of petroleum and natural gas must begin to look for poorer quality reservoirs, those containing high carbon dioxide and hydrogen sulfide or complex geology, to fill the high energy demand. Producing these resources is dangerous and unfriendly to our environment because of the pres-



ence of toxic hydrogen sulfide and carbon dioxide. All these raw products need special process to become useful energy. The big question arises as to what can be done with the by-products of these processes: hydrogen sulfide, carbon dioxide and others. If the raw contains sufficient quantities of hydrogen sulfide, it can be converted to something more benefit such as elemental sulfur. However, as the production of sulfur increases, certainly the demand and the price will fall. Is there another option? Carbon dioxide also has poses problems to our environment. What do we do with  $CO_2$ ? Continue to release to the atmosphere? Whether or not



you believe that man is changing the earth's climate, it is very clear that the earth's environment is changing.

Three technologies have emerged (or are emerging) that increase the energy supply and reduce the effect on the environment. These technologies are: **1.** Acid gas injection (AGI), **2.** Enhanced oil recovery by  $CO_2$  injection (CO<sub>2</sub> EOR), and **3.** Carbon capture and storage (CCS). Each of these involves the injection of a stream rich in hy-

drogen sulfide, carbon dioxide, or

both. These mixtures are called acid gases; a name that arises because  $CO_2$  and  $H_2S$  form weak acids when dissolved in water.

A symposium discussing for acid gas injection in all its forms was the brainchild of Sphere Technology Connection, a Calgary company specializing in transfer technology related to the petroleum industry throughout the world. AGIS discusses all processes related to the injection of acid gases – AGI,  $CO_2$  EOR, rich gas injection EOR and CCS. All of these





### What is AGIS?

AGIS-IV September 24<sup>th</sup> to 27<sup>th</sup>, 2013

**The Coast Plaza Hotel & Conference Center, Calgary** 1316 33<sup>rd</sup> Street NE, Calgary, Alberta, Canada T2A 6B6



processes share common aspects and there are synergies that can be exploited from the more mature processes (EOR) to the emerging processes (CCS).

The first two International Acid Gas Injection Symposia (AGIS) were held in Calgary in October 2009 and September 2010 and the third in Banff in May 2013. In attendance were more than 150 delegates from Canada, the USA, Europe, Australia, and Asia presenting expertise and experience related

to all aspects AGI, CCS, and topics related to EOR. In total more than 100 papers were presented including four keynote addresses. We have a distinguished list of keynote speakers including Dr. Mehran Pooladi-Davish, Vice President Engineering of Fekete Associate, Calgary and Dr. John Carroll, Director of Geostor-age Process Engineering at Gas Liquids Engineering, Calgary both in 2009, Dr. Stefan Bachu. Distinguished Scientist, CO<sub>2</sub> Storage at Alberta Innovates – Technology Futures, Edmonton in 2010, and Prof. Abbas Firoozabadi, from Yale University, New Haven, USA in 2012. In 2013 we are pleased to have Mr. Len Heckel, Business Opportunity Manager from the Shell Quest as our Keynote Speaker.

We hope to see you in Calgary, Alberta, Canada to share your advanced technology and experiences again.





### **AGIS IV GLE RECEPTION**

7:30pm to 10:30pm, September 24<sup>th</sup>, 2013 Plaza 3, the Coast Plaza Hotel & Conference Center, Calgary 1316 33<sup>rd</sup> Street NE, Calgary, Alberta, Canada T2A 6B6

**Event Name:** GLE AGIS IV Reception

**Time:** 7:30pm-10:30 pm, September 24<sup>th</sup>, 2013

Location: Plaza 3, Coast Plaza Hotel and Conference Center

Address: 1316 33<sup>rd</sup> Street NE, Calgary, Alberta, Canada T2A 6B6

**Description:** All attendees at the Acid Gas Injection Symposium are invited to the evening reception, which is sponsored by Gas Liquids Engineering. Please join us for a drink some finger food and a chance to mingle with others.

The Evening Reception is included as parts of the registration package so all are encouraged to attend.

#### **Registration Methods:**

Online: http://www.spheretechconnect.com/Registration.html

Email: information@spheretechconnect.com

Call: 1 403 619 6215

Fax: 1 888 894 4941

### **AGIS IV TRADESHOW**

8:30am to 4:30pm, September 25<sup>th</sup> – 26<sup>th</sup>, 2013 Conference Center, the Coast Plaza Hotel & Conference Center, Calgary 1316 33<sup>rd</sup> Street NE, Calgary, Alberta, Canada T2A 6B6

Event Name: AGIS IV Tradeshow

Time: 8:30pm-04:30 pm, September 25th - September 26th, 2013

Location: Conference Center, Coast Plaza Hotel and Conference Center

Address: 1316 33<sup>rd</sup> Street NE, Calgary, Alberta, Canada T2A 6B6

**Description:** As a part of AGIS IV, we have opened a space for companies who would like to share technologies on acid gas injection,  $CO_2$  injection, carbon capture and storage (CCS),  $CO_2$  enhanced oil recovery (EOR), sour gas treatment, and related technologies. The AGIS Posters Session will also be held in the Trade Show room. All attendees at the Acid Gas Injection Symposium are invited to this event.

We also welcome other people who may be interested in AGI projects and technologies to join us for this show. It is an opportunity for all AGIS attendees to network and communicate with each other during the conference.

#### **Registration Methods:**

Online: http://www.spheretechconnect.com/Registration.html Email: information@spheretechconnect.com Call: 1 403 619 6215 Fax: 1 888 894 4941



### **AGIS IV Program Information**

September 24<sup>th</sup> to 27<sup>th</sup>, 2013

The Coast Plaza Hotel & Conference Center, Calgary 1316 33<sup>rd</sup> Street NE, Calgary, Alberta, Canada T2A 6B6

#### Tuesday 24<sup>th</sup>, September 2013

07:30 pm - 10: 30 pm AGIS IV GLE Reception

#### Wednesday 25<sup>th</sup> September 2013

0815 - 0830	Introduction	Ying (Alice) Wu, Sphere Technology Connection
0830 - 0915	Keynote paper	Len Heckel (Tim Wiwchar), Shell Canada Shell's Quest Carbon Capture and Storage Project
0915 - 0945	Paper 1	Q. Li, G. Liu and X. Liu, Chinese Academy of Sciences Development of Management Information System of Global Acid Gas Injection Projects
0945 – 1015	Paper 2	A. Gutierrez and J. C. Hunter, Geolex Control and Prevention of Hydrate Formation and Accumulation in Acid Gas Injection Systems During Transient Pressure/ Temperature Conditions
1015 - 1100	COFFEE	
1100 - 1130	Paper 3	M. Satyro and J. J. Carroll, Virtual Materials Group and Gas Liquids Engineering Phase Equilibrium in the Systems Hydrogen Sulfide + Methanol and Carbon Dioxide + Methanol
		S. Pan, N. Jia, H. Schroeder, Y. Cheng, K. A. G. Schmidt, and H-J Ng, Schlumberger
1130 - 1200	Paper 4	Vapour-Liquid Equilibrium of Aqueous Solutions of Ethylene Glycol or Triethylene lycol in the Presence of Methane, Carbon Dioxide and Hydrogen Sulfide
1200 - 1330	LUNCH	
1330 - 1400	Paper 5	E. Heidaryan and J. Moghadasi, Shiraz University and Petroleum University of Technology New Model to Predict Infinite Dilution Diffusion Coefficient of Carbon Dioxide in Water and Brines
1400 - 1430	Paper 6	W. McKay, R. Anwar, and J. Maddocks, Gas Liquids Engineering
		Enhanced Gas Dehydration using Methanol Injection in an Acid Gas Compression System
		A. D. I. Arandson, C. F. Varetaag, I. van der Lee, D. Cote, and M. Seturo
1420 1500	Demon 7	A. R. J. Arendsen, G. F. Versteeg, J. van der Lee, R. Cota, and M. Satyro PROCEDE Gastreating and Virtual Materials Group
1430 - 1500	Paper 7	
1430 - 1500 1500 - 1530	Paper 7 COFFEE	PROCEDE Gastreating and Virtual Materials Group Comparison of the Design of CO <sub>2</sub> -Capture Processes Using Equilibrium and Rate Based
	-	PROCEDE Gastreating and Virtual Materials Group Comparison of the Design of CO <sub>2</sub> -Capture Processes Using Equilibrium and Rate Based
1500 – 1530	COFFEE	<ul> <li>PROCEDE Gastreating and Virtual Materials Group</li> <li>Comparison of the Design of CO<sub>2</sub>-Capture Processes Using Equilibrium and Rate Based</li> <li>Models</li> <li>R. A. Tomcej, Tomcej Engineering</li> <li>Post-Combustion Carbon Capture Using Aqueous Amines: A Mass-Transfer Study</li> </ul>
1500 – 1530	COFFEE	<ul> <li>PROCEDE Gastreating and Virtual Materials Group</li> <li>Comparison of the Design of CO<sub>2</sub>-Capture Processes Using Equilibrium and Rate Based</li> <li>Models</li> <li>R. A. Tomcej, Tomcej Engineering</li> </ul>



### Thursday 26<sup>th</sup>, September 2013

0800 - 0830	Paper 10	Q. Li, X. Liu, X. Li, and L. Du, Chinese Academy of Sciences
0000 - 0050	Taper 10	Review of Key Problems of Rock Mechanics for Acid Gas Injection
0830 – 0900	Paper 11	V.T. Kanneganti, P. P. Sripada, S. Ramasamy, J. Trivedi, and R. Gupta, University of Alberta
0050 0700	Tuper II	Comparison of CO <sub>2</sub> Storage Potential in Pyrolysed Coal Char of Different Coal Ranks
0000 0020	Daman 12	O. Zatsepina, H. Hassanzadeh, and M. Pooladi-Darvish, Fekete and University of Calgary
0900 - 0930	Paper 12	Reservoir Modeling of Storage of $CO_2$ in the Form of Hydrate in Depleted Gas Pools of Northern Alberta
		Normeni Alberta
		X-H Wang, C-Y Sun, Q-Y Yuan, and C-J Chen, China University of Petroleum
0930 - 1000	Paper 13	Methane Recovery from Natural Gas Hydrate in Porous Sediment Using Gaseous CO <sub>2</sub> ,
		Liquid CO <sub>2</sub> , and CO <sub>2</sub> Emulsion
1000 - 1030	COFFEE	
		A. Telmadarreie, A. Doda, J. Trivedi, E. Kuru, and P. Choi, University of Alberta
1130 - 1100	Paper 14	Investigation of $CO_2$ Microbubble for Heavy Oil Recovery and Sequestration
		D. Sun, N. Daraboina, J A. Ripmeester, and P. Englezos
1100 - 1130	Paper 15	University of British Columbia and National Research Council of Canada
		Capture of CO <sub>2</sub> and Storage in Depleted Gas Reservoirs in Alberta as Gas Hydrate
		E. Heidaryan and J. Moghadasi, Shiraz University and Petroleum University of Technology
1130 - 1200	Paper 16	Novel Method Estimates Relative Permeability Curves of Carbon Dioxide and Water in
		Sandstone Rocks at Reservoir Conditions Without SCAL Test
1200 - 1330	LUNCH	
1200 1330	Lenten	
		N. C. Griffin, University of Calgary
1330 - 1400	Paper 17	"Is That a Bacterium in Your Trophosome, or Are You Just Happy to See Me?" - Hydrogen
		Sulfide, Chemosynthesis, and the Origin of Life
		L. Ali, R. E. Bentley, A. A. Gutierrez, and Y. Gonzalez
1400 - 1430	Paper 18	PB Energy Storage Services, Geolex, and Schlumberger
	1	Using Distributed Temperature Sensing (DTS) Technology in Acid Gas Injection Design
1430 - 1500	Paper 19	E. L. Roberts and J. J. Carroll, Gas Liquids Engineering
	<u>r</u>	Densities of Carbon Dioxide-Rich Mixtures Part 1: Comparison with Pure CO <sub>2</sub>
1500 1520	COFFEE	
1500 - 1530	COFFEE	
1520 1600	D 20	D. Engel and M. H. Sheilan, Amine Experts
1530 - 1600	Paper 20	Seven Deadly Sins of Filtration and Separation Systems in Gas Processing Operations
		H.S. cranson K.S. Dadarson and D.J. Christonson Coloop A/S
1600 - 1630	Paper 21	H. Sørensen, K. S. Pedersen and P. L. Christensen, Calsep A/S Method for Generating Shale Gas Fluid Composition from Depleted Sample
		Menor for Generating Shale Gas Fund Composition from Depicted Sample
1630 - 1645	Closing	Ying (Alice) Wu, Sphere Technology Connection
	U	



#### AGIS IV Posters

1	Paper 22	C-Y Sun, J. Chen, K-L Yan, B-Z Peng, and G-J Chen, China University of Petroleum, Beijing Evaluating and Testing of Gas Hydrate Anti-Agglomerants in (Natural Gas + Diesel Oil + Water) Dispersed System
2	Paper 23	J. Boutros and J. M. Shaw, University of Alberta On Developing High Precision Heat Capacity Correlations for Organic Solids, Liquids and Ideal Gases
3	Paper 24	S. Rajaeira and J. M. Shaw, University of Alberta On Transferring New Constant Pressure Heat Capacity Computation Methods to Engineering Practice
4	Paper 25	P. Pirzadeh and P. G. Kusalik, University of Calgary On the Role of Ice-Solution Interface in Heterogeneous Nucleation of Methane Clathrate Hydrates
5	Paper 26	H. Sharifi, N. Daraboina, J. A. Ripmeester and P. Englezos University of British Columbia and National Research Council of Canada Nucleation, Growth and Dissociation of Gas Hydrates in Gas/Water and Gas/Oil/Water Type Systems
6	Paper 27	E. L. Roberts and J. J. Carroll, Gas Liquids Engineering, Densities of Carbon Dioxide-Rich Mixtures Part 2: Comparison with Thermodynamic Models
7	Paper 28	W-Y. Zhu, J. Deng, and Q. Ma, University of Science and Technology Beijing, Prediction Method on the Multi-scale Flow Patterns and the Productivity of a Fracturing Well in Shale Gas Reservoir in China
8	Paper 29	W-Y. Zhu, X-H. Huang, and M. Yue, University of Science and Technology Beijing A Modified Calculation Method for the Water Coning Simulation Mode in Oil Reservoirs with Bottom Water Drive

### Friday 27th, September 2013

07:30am - 08:30 am Breakfast and Registration

08:30am - 12:00 pm AGIS IV Workshop by James van der Lee

01:30pm - 04:30 pm AGIS Roundtable Discussion



### **AGIS IV ROUNDTABLE DISCUSSION**

1: 30pm to 4:30pm, September 27<sup>th</sup>, 2013 Plaza 3, the Coast Plaza Hotel & Conference Center, Calgary 1316 33<sup>rd</sup> Street NE, Calgary, Alberta, Canada T2A 6B6

#### **Event Name:** AGIS IV Roundtable Discussion

Time: 1:30pm-4:30 pm, September 27th, 2013

Location: Boardroom, Coast Plaza Hotel and Conference Center

Address: 1316 33<sup>rd</sup> Street NE, Calgary, Alberta, Canada T2A 6B6

- **Objects:** We have assembled a panel of experts on different aspects of acid gas injection to answer AGIS attendee's questions and to help troubleshot practical technical problems.
- **Requirement:** The Round Table is open to all attendees at AGIS. We strongly encourage people to prepare their questions in advance, but spur of the moment questions will also be accepted.

Chair: Johnny Johnson, URS Energy and Construction

**Co-Chair:** John Carroll, Gas Liquids Engineering

#### Panel: Reservoir Engineering

David Dunn, President or Mehran Pooladi-Darvish, Vice President, Fekete Associates

#### **Panel:** *Process Engineering*

Jim Maddocks, Vice President, Engineering, Gas Liquids Engineering

#### **Panel:** Compression Specialist

Johann Scherer-Brown, Manager, Burckhardt Compression

#### **Process Safety Engineering**

Daryl Kenefake, Sr. Consultant Loss Prevention, ExxonMobil Development Company

All questions will be limited to the topics related to acid gas injection.

**Who can attend?** Project managers, AGI engineers and students who may be interesting about AGI projects.



### **AGIS IV Keynote Speaker**

September 24<sup>th</sup> to 27<sup>th</sup>, 2013 The Coast Plaza Hotel & Conference Center, Calgary 1316 33<sup>rd</sup> Street NE, Calgary, Alberta, Canada T2A 6B6

Len Heckel Business Opportunity Manager Development, Heavy Oil - Project Quest Shell Canada Energy



Len is responsible for the Quest Carbon Capture and Storage (CCS) business opportunity, namely to provide a single-point oversight for the project.

Len graduated as a chemical engineer and brings 30 years of experience in oil and gas business, engineering and plant operations, including 10 years at Shell's Alberta Scotford complex. For the past 15 years he has been involved in developing and evaluating business opportunities in Shell's refining and upgrading activities. He spent 3 years as the business and commercial manager for the Quest project prior to taking on the Business Opportunity Manager role in 2012.

The Quest Carbon Capture and Storage Project will reduce  $CO_2$  emissions from Shell's oil sands operations by more than one million tonnes a year.  $CO_2$  will be captured from Scotford upgrader and transported by pipeline to a location 80 km to the north. There it will be injected into a formation about 2300 m below the surface permanently storing it deep underground.



### **AGIS Organization**

AGIS IV, September 24<sup>th</sup> to 27<sup>th</sup>, 2013 The Coast Plaza Hotel & Conference Center, Calgary 1316 33<sup>rd</sup> Street NE, Calgary, Alberta, Canada T2A 6B6

**STUP** Canada. STC specializes in technical training and technology connection for oil and gas industry throughout the world. Since its establishment in 2008, STC has successfully hosted several training courses on Natural Gas Hydrates, Acid Gas Injection, Project Cost Control, Project Management, etc. STC also proudly and successfully hosted the International Acid Gas Injection Symposium annually which included a tradeshow. We are now in the process organizing the Third International Acid Gas Injection Symposium (AGIS2012) that will include a conference and workshops. It is great business networking opportunities. We are hard at work to actively involve all kinds of petroleum events and to make sure we can offer the best technology connection.

STC Technical Training In the current phase of petroleum development, training and the advanced technical resources are very important. The goal of STC is to connect a group of experts, professors, engineers with companies to offer a series of the advanced technical training programs for the oil and gas industry.

The STC training programs cover almost every aspect of the oil and gas business from the surface to the reservoir to management. These training courses include natural gas treatment for gas with high  $H_2S$  and  $CO_2$  content, SAGD production, natural gas hydrates, acid gas injection, sour gas incineration, project management, project cost control, oil sand production technology, etc.

STC offers technology training programs with long duration or short, local or overseas. We can specially design your training course to suit your particular requirements.

www.spheretechconnect.com



## **AGIS IV REGISTRATION**

September 24<sup>th</sup> to 27<sup>th</sup>, 2013

The Coast Plaza Hotel & Conference Center, Calgary 1316 33<sup>rd</sup> Street NE, Calgary, Alberta, Canada T2A 6B6

#### \* AGIS IV Registration Fee is \$1288 per person.

AGIS IV speaker rate is \$988. Group discount is 20%. The group discount only applies for three or more attendees from the same company registering at the same time. The first two registers will be at the regulate rate and the third, fourth, etc. get the discount. Student discount is 60%. All registration fees including the following terms:

1. AGIS-IV Reception (sponsored by Gas Liquids Engineering Ltd.

- 2. AGIS-IV Proceeding
- 3 AGIS-IV Material Packages
- 3. AGIS-IV Breakfast Buffets
- 5. AGIS-IV Luncheons
- 6. AGIS-IV workshop and materials
- 7. AGIS-IV Roundtable discussions

#### \* AGIS-IV Tradeshow Registration Fee: \$488 per company including:

- 1. Tradeshow table and chairs
- 2. Trade show host receive 20% off at registration.
- 2. Power supplies
- 3. Company information distribution

#### \* AGIS-IV Schedule

- 1. AGIS-IV Reception
- 2. AGIS-IV and Tradeshow Day I
- 3. AGIS-IV & Tradeshow Day II
- 4. AGIS-IV Workshop
- 5. Roundtable Discussion
- 7:30am 05:00 pm September 25<sup>th</sup> 2013
  - 7:30am 05:00 pm September 26<sup>th</sup> 2013

7:30pm -10:30 pm September 24<sup>th</sup> 2013

- 7:30am 12:00 pm September 27<sup>th</sup> 2013
- 1:00pm 04:30 pm September 27<sup>th</sup> 2013

#### \* AGIS-IV Register Contact Information:

- Contact: Alice Wu
- **Phone:** 1 403 456 6050 / 1 403 619 6215
- Fax: 1 888 894 4941
- Email: alicewu@spheretechconnect.com
- Website: www.spheretechconnect.com
- On-line Register: http://www.spheretechconnect.com/registration.thml



### **AGIS SPONSORSHIPS**

AGIS IV September 24<sup>th</sup> to 27<sup>th</sup>, 2013

The Coast Plaza Hotel & Conference Center, Calgary 1316 33<sup>rd</sup> Street NE, Calgary, Alberta, Canada T2A 6B6

#### Symposium Schedule

September 24<sup>th</sup>, 2013 \_\_\_\_\_AGIS IV Reception, Gas Liquids Engineering Ltd. September 25<sup>th</sup> -26<sup>th</sup>, 2013 \_\_\_\_\_ International Acid Gas Injection Symposium, Sphere Technology Connection September 27<sup>th</sup>, 2013 \_\_\_\_\_AGIS IV Workshop, Virtual Material Group Inc. September 27<sup>th</sup>, 2013 \_\_\_\_\_AGIS IV Roundtable Discussion, AGIS Technical Committee Group September 25<sup>th</sup> - 26<sup>th</sup>, 2013 \_\_\_\_\_AGIS IV Trade Show Exhibits, Sphere Technology Connection

#### **Registration Information**

#### AGIS IV Registration Fee is \$1288 per person.

AGIS IV speaker rate is \$988. Group discount is 20%. Student discount is 60%.

The group discount only applies for three or more attendees from the same company registering at the same time. The first two registers will be at the regulate rate and the third, fourth, etc. get the discount. All registration fees including the following terms:

- 1. AGIS-IV Reception, sponsored by Gas Liquids Engineering Ltd.
- 2. AGIS-IV Proceeding
- 3 AGIS-IV Material Packages
- 3. AGIS-IV Breakfast Buffets
- 5. AGIS-IV Luncheons
- 6. AGIS-IV workshop and workshop and materials
- 7. AGIS-IV Roundtable discussions and materials

#### AGIS IV Tradeshow Registration Fee: \$488 per company including:

- 1. Tradeshow table and chairs
- 2. Trade show host receive 20% off at registration.
- 2. Power supplies
- 3. Company information distribution

#### Symposium Sponsorship:

- AGIS IV Reception \$4000AGIS IV Workshop \$3000
- AGIS IV Luncheons \$ 1500
- AGIS IV Breakfast \$1000
- AGIS IV Coffee Breaks \$ 500

For more information and sponsorship opportunities Email to information@spheretechconnect.com Call: 1 403 619 6215

(Gas Liquids Engineering Ltd.) (Virtual Materials Group Inc.) (Geolex Inc.)

All sponsors will get fee AD in AGIS IV proceedings and company brochure distribution into AGIS IV packages. Company name will be the host in sponsored events and also get free tradeshow table.



### AGIS IV ROOM BOOKING

September 24<sup>th</sup>- 27<sup>th</sup>, 2013

Plaza 3, the Coast Plaza Hotel & Conference Center, Calgary 1316 33<sup>rd</sup> Street NE, Calgary, Alberta, Canada T2A 6B6

#### Venue Name: The Coast Plaza Hotel and Conference Center, Calgary

Phone: 1800 663 1144 or 1 403 248 8888 (Hotel Front Desk)

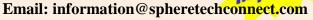
Address: 1316 33<sup>rd</sup> Street NE, Calgary, Alberta, Canada T2A 6B6

#### **Room Booking Information:**

Group Book: Please booking room through information below otherwise you may not get Important!!!

group rate.

By Phone: 1 403 619 6215



**Room Rate:** The following room rates will be only for the guest who will attend 4<sup>th</sup> International Acid Gas Injection Symposium during September 23rd to 28<sup>th</sup>, 2013. All rates are based on the occupancy of a room.

Room Type	Single	Do ub le	Trip le	Quadra
Comfort	\$129	\$ 129	\$144	\$ 159
Superior	\$154	\$ 154	\$ 169	\$ 184
Jacuzzi	\$ 204	\$ 204	\$ 219	\$ 234
Executive	\$224	\$ 224	\$ 239	\$ 254



#### Shuttle Service: It is Free Service!

The Coast Plaza Hotel & Conference Centre will supply complimentary shuttle bus service (weather permitting) to and from Calgary International Airport. Shuttle bus service will only available by reservation. Shuttle bus run from 5:00AM to 1:00AM daily.

For Shuttle Bus Service Reservation: 1 403 248 8888 or toll free 1 800 661 1464

At Calgary airport, shuttle bus will be waiting at **Bus Bay #10**. to access Bus Bay #10, please exit the Airport through door #8 on the Arrivals Level. If shuttle buts is not there or your flight delay or early, please use airport complimentary phone (yellow phone) at Bay #10 to call automatically to Coast Plaza to arrange another shuttle bus.



### **AGIS IV Technical Committee**

September 24<sup>th</sup> to 27<sup>th</sup>, 2013 The Coast Plaza Hotel & Conference Center, Calgary 1316 33<sup>rd</sup> Street NE, Calgary, Alberta, Canada T2A 6B6

#### **CHAIRMAN**

John J. Carroll	Director, Gas Liquids Engineering Ltd., Canada				
MITTEE					
Alan E. Mather	Professor, University of Alberta, Canada				
Peter J. Griffin	Vice President, Gas Liquids Engineering Ltd., Canada				
Marco A. Satyro	Senior Engineering Fellow, Virtual Materials Group, Canada				
Mehran Pooladi-Da	rvish Vice President, Fekete Associate Inc., Canada				
<b>Bruce Roberts</b>	Chief Reservoir Engineer, Athabasca Oil Sand Corp., CA				
John Foster	Process Specialist, Foster Wheeler, UK				
Johnny Johnson	Vice President, URS International, USA				
Rob Marriott	Assistant Professor, University of Calgary.				
Liang Baosheng	Lead Research Scientist, Chevron, USA				
Li Xiaochun	Professor, State Key Laboratory of Geomechanics and				
	Geotechnical Engineering Institute of Rock and Soil Mechanics				
	(IRSM), Chinese Academy of Sciences (CAS), Wuhan, China				
Zhu Weiyao	Professor, University of Science & Technology, China				
Li Qi	Professor, State Key Laboratory of Geomechanics and				
	Geotechnical Engineering Institute of Rock and Soil Mechanics				
	(IRSM), Chinese Academy of Sciences (CAS), Wuhan, China				
Alice Wu	President, Sphere Technology Connection Ltd., Canada				

COMN

### **AGIS IV Venue Information**

#### September 24<sup>th</sup> to 27<sup>th</sup>, 2013

The Coast Plaza Hotel & Conference Center, Calgary 1316 33<sup>rd</sup> Street NE, Calgary, Alberta, Canada T2A 6B6

#### **Other Travel Time:**

Edmonton	3 hour	Red deer	1.5 hours
Lethbridge	2 hours	Banff	1 hour
Vancouver	12 hours	Jasper	3.5 hours
Kamloops	6 hours	Kananaskis Country	1 hour

#### Map and Direction:



#### **Other Service:**

The Coast Plaza Hotel & Conference Centre is located in the very idea location in Calgary, Alberta, Canada. They supply some unique service and facilities as following:

- Indoor pool, whirlpool, sauna
- Fitness gym
- Complimentary parking
- Complimentary Business Centre with high speed Internet service
- Valet laundry



## **AGIS-IV REGISTRATION**

September 24<sup>th</sup> to 27<sup>th</sup>, 2013

**The Coast Plaza Hotel & Conference Center, Calgary 1316 33<sup>rd</sup> Street NE, Calgary, Alberta, Canada T2A 6B6** 

- \* You can always register on line at http://www.spheretechconnect.com/registration.html
- \* You can check registration fee information at <a href="http://agis.spheretechconnect.com">http://agis.spheretechconnect.com</a>

Nai	me		Title			
Work Pho	one		Cell Phone			
Direct Pho	one		Fax Number			
Company Na	me					
Mailing Addro	ess					
Delegation N	No.					
Em	Email					
Are you a speaker	Are you a speaker at AGIS-IV? Yes No					
Does company need a tradeshow table at exhibition room?				Yes	No	
Are you a student in university?				Yes	No	
Would you attend AGIS-IV reception?				Yes	No	
Would you attend AGIS-IV workshop and roundtable discussion (Free)?				Yes	No	
Do you need a room reservation?				Yes	No	
If need room	Select Room Type	Single	Double	Triple	Executive	
booking	Arrive Date		Departure Date			

**Payment Method:** 

There are special AGIS-IV speaker and student rate available.

VISA	Master Card	American Express	Company Cheque
Card Number			
Expire Date		Card Holder Name	

#### Signature:

For your safety concern, please fax this form or email to Alice Wu at Sphere Technology Connection Ltd. **Contact:** Alice Wu Phone: 1 403 456 6050 / 1 403 619 6215 **Fax:** 1 888 894 4941 **Email:** alicewu@spheretechconnect.com



September 24<sup>th</sup>, AGIS IV Reception is sponsored By Gas Liquids Engineering Ltd. September 25-26<sup>th</sup>, Symposium

September 25, AGIS IV Workshop by Virtual Material Group Inc.

September 27th, AGIS IV Technical Roundtable





### **Sphere Technology Connection Ltd.**

Contact: Alice Wu/ Max Chen Phone: 1 403 619 6215 / 1 403 456 6050 Fax: 1 888 894 4941 Email: training@spheretechconnect.com Website: www.spheretechconnect.com