

6th Annual Gas-to-Liquids Technology
& Commercialization Conference & Exhibition

22 - 23 January
Sheraton Doha Hotel & Resort

GTLtec

DOHA • 2007

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"Be in Qatar...where GTL really happens"

Join us in Doha for the biggest GTL event of the year !

An impressive line up of authoritative speakers to give you the real global picture of GTL developments, technologies & opportunities.

Key highlights of **GTLtec DOHA 2007**

- **Upcoming surge in new capacities - implications on GTL technology & industry developments**
With the start up of Oryx, the world's first commercial scale GTL plant, Qatar has firmly established itself as the GTL capital of the World. Shell & ExxonMobil are each progressing integrated GTL projects in Qatar, helping the country to realise its goal of becoming the world's largest GTL producer by 2010. As the world watches how Oryx performs, many countries and companies have already announced GTL plans - how soon will they come into implementation ?
- **GTL Economics & Prospects amidst high project costs**
Global phenomena of commodity price increases, engineering and construction skill shortages results in cost overruns for GTL projects. What is the industry response ?
- **Emerging Players in the field**
New players TOTAL & JOGMEC join the list of GTL technology developers and will share with us their experiences & demonstration projects
- **Technology advancements - Synthesis Gas, Air separation, Catalysts , Microchannel processes**
- **Update on global projects - Iran, Algeria, Australia, Venezuela**
- **Environmental issues / GHG status of GTL**
- **Comparing GTL/ CTL & BTL and more...**

Register NOW online @ www.gtltec.com

SUPPORTING PUBLICATIONS & MEDIA



Day 1

Monday, 22nd January

8:00 Welcome Coffee
Hosted by **KBR**
Energy and Chemicals

9:00 Minister's Opening Address
H.E Abdullah Ahmad Al-Attiyah
Deputy Premier, **Minister of Energy & Industry**,
Chairman of **Qatar Petroleum**

9:20 Morning Coffee
Hosted by **HALDOR TOPSØE**

10:00 **ORYX LESSONS LEARNED & EXPANSION PLANS**
Chris Turner, General Manager
Oryx GTL

Session 1 - Presentations by GTL Key Players in Qatar

10:40 **STRONG PARTNERSHIP BETWEEN QATAR PETROLEUM AND EXXONMOBIL FOSTERS DIVERSIFICATION INTO GTL**
* Jerry J. Wolahan, Vice President - Middle East
ExxonMobil Development Company * to be confirmed

11:20 **A DAY IN THE LIFE OF PEARL GTL**
Andy Brown, General Manager, Pearl GTL
Shell

12:00 **BUILDING ON THE ACHIEVEMENT OF ORYX**
• Developing projects & markets, the next steps for the GTL industry
Patrick Butcher, Country Manager
SasolChevron

Session 2 - GTL Economics/ Prospects in Current Climate

Escalating construction costs and commodities remain an uncertainty and raises questions of GTL project economics. What is its future outlook?

12:40 Panel Discussion
CAN THE E&C INDUSTRY MEET INCREASING GLOBAL DEMAND ?
• Where are the price increase coming from ?
Availability of trained engineers
- Ray Orriss, Director GTL
Halliburton
- Andreas Brox, Project Manager –
Air Separation Plants
Linde AG
- Shaheen Chohan, Director of Market Insights
CONTAX

1:00 Discussion followed by Lunch

2:10 **GTL : MEETING THE MARKET CHALLENGES**
Ian Davison, Business Development Manager
Gas to Products
BP

2:40 **MAJOR CHALLENGES FACING OPERATORS & CONTRACTORS IN THE MIDEAST AND IMPACT ON CONTRACTING STRUCTURE**
Tony Bury, Managing Director
CONTAX

3:10 **PROSPECTS & IMPLICATIONS OF GTL EXPANSION FOR THE GLOBAL ENERGY OUTLOOK**
Trevor Morgan, Economic Analysis Division
International Energy Agency

3:40 Discussion followed by Tea
Hosted by **SPX Cooling Technologies**
Balcke | Hamon Dry Cooling | Marley

Session 3 - Technology Advancements

4:15 **ORYX GTL INITIAL OPERATING EXPERIENCE**
- Andre Steynberg, GTL Technology Manager
Sasol Technology
- Per Bakkerud, Director, Technology & Engineering
Haldor Topsøe

4:45 **IMPLEMENTATION CHALLENGES FOR WORLDSCALE AIR SEPARATION PLANTS FOR PEARL GTL**
• Meeting logistics issues
• Process design, optimising overall plant layout
Dr. Gerhard Beysel, Business Devt Manager
Linde AG

5:15 **CATALYST DEVELOPMENTS FOR SYNGAS GENERATION & BEYOND GTL**
Dr Hans-Joachim Mueller, Group VP
- Catalytic Technologies
Sud Chemie

Session 4 - Emerging Players

5:45 **GAS TO LIQUIDS: THE KEY TOWARDS HIGHER EFFICIENCIES**
Dr Sabine Savin, R&D GTL Coordinator
Total

6:15 **DEMONSTRATION PLANT PROJECT (JOGMEC/NIPPON GTL TECH RESEARCH ASSOC.)**
Yoichi Norisugi, Senior Councilor
Oil & Gas / Upstream Tech Unit
JOGMEC

6:45 Discussion. Close of Day 1

Luncheon Hosted by



1900 - 2000 hrs. *Networking Reception*
Hosted by



Day 2

Tuesday, 23rd January

(Choice of 2 concurrent tracks)

Track A

8:00	Chairman's Introduction
Session 5 - Global Projects: Plans & Update	
8:10	IRAN MOVING FORWARD WITH GTL PLANS * H.E. Nejabat, President of NPC , Deputy Petroleum Minister * awaiting confirmation
8:40	ALGERIA PLANS AND THE PROGRESS FOR TENDERING OF THE GTL TINRHERT PROJECT Abdelhakim Benaouda Tinhert Integrated GTL Project Manager Sonatrach
9:10	Discussion followed by Morning Coffee
9:50	AUSTRALIA GTL OPTIONS IN i) Northern Territory Brian Cann, Assistant Direct Gas Industries, Dept of the Chief Minister Northern Territory Govt ii) Central Australia John Heugh, Managing Director Central Petroleum Limited
10:50	VENEZUELA GTL PLANS & DISOL PROJECT UPDATE Luis F. D'Elia, PDVSA Intevep GTL Project Leader

Session 6 – Environmental Issues/Life Cycle Analyses

11:20 **GTL GREENHOUSE GAS (GHG) PERFORMANCES**
Dominique Laurent, Manager, Sustainability Dept
PricewaterhouseCoopers

GHG ANALYSIS OF GTL & CTL PROJECTS
Dr Michael Wang
Argonne Laboratory

12:10 Discussion followed by Lunch

Session 7 – Comparative Economics of GTL, CTL, BTL

CTL and BTL are rapidly advancing in many markets, and both represent interesting potential competition to GTL as an alternative to conventional petroleum. Will CTL, BTL threaten to oversupply the liquids (diesel) market eventually?

2:00 **GTL, CTL AND BTL – FRIENDS OR ENEMIES**

- Technology and Status
- Competing processes and approaches
- Product qualities
- Outlook for future
- Competitive economics

Bruce F. Burke, Vice President, Global Oil and Gas
Nexant

2:30 **FUTURE OF SYNTHETIC FUELS FROM GTL, CTL & BTL**
Hartmut Heinrich, Executive Manager
Volkswagen AG

3:00 **DRIVING GTL TO THE LIMIT**
Short clips & presentations from

- ♦ **SasolChevron GTL Challenge & Experience**
Malcolm Wells, Marketing & Communications Manager
SasolChevron
- ♦ **Shell GTL Fuel**
Senior Representative
Shell

3:45 Final Discussion & Close of Conference

Track B

GTL CATALYSIS WORKSHOP

PROGRAM

- **FISCHER-TROPSCH TECHNOLOGY**
 - Where are we?
 - Which parts of the technology are of particular concern to lenders?
 - State of the art and new developments.
- **BROAD OUTLINE OF THE PRINCIPAL STEPS USING F-T GTL PROCESSES TO CONVERT NATURAL GAS TO**
 - Synthetic crudes
 - Liquid hydrocarbon fuels
 - Waxes
 - Lubricants and other products
 - Alternative products slates and products qualities of the F-T GTL processes
- **TRENDS IN FT TECHNOLOGY USING IRON AND COBALT CATALYSIS : REACTORS AND FEED**
- **FISCHER-TROPSCH SYNTHESIS IN FIXED BED VS SLURRY BED REACTORS. IS IT A CLEAR DECISION?**
- **GTL CATALYSIS - FT CATALYSTS**
- **ECONOMICS**
- **GTL CATALYSIS DEVELOPMENTS**
 - Where are we and what is the current development trend, if any?
 - Patent status/issues
 - Selection of GTL catalysts – Main variables
 - Preparation and characterization of catalysts - From client laboratory scale to the catalyst supplier facilities – What are the present/ expected problems and how could this be improved?
 - Role of the catalyst supplier in the catalyst development/improvement

WORKSHOP TIMING

Morning Session: 8.10am to 11:10am
Coffee Break at 9:10am
11:20am - Attend Session 6 of Track A
Lunch at 12:10pm
Afternoon Session: 2:00pm to 4.45pm

What our past delegates say about GTLtec...

"The quality and depth of the presentations made at GTLtec 2005 was impressive and the networking opportunities were excellent. Attendance at GTLtec Conferences is obligatory for any company considering entering the GTL business."

Geoff Hunter, Principal Engineer - Strategic Technologies, Development Projects & Technical Services, Santos Ltd

"CMT's GTLtec conference in Doha is one of the best GTL conferences being produced in the World - it has an excellent mix of high quality papers concentrating on all aspects including technical issues. The 2005 event maintained the standard and I look forward to participating in the next event."

John Hutton, Vice President, Syntroleum International Corporation

"GTL technology presents a competitive opportunity to add value to Natural Gas resources. GTLtec 2005 presented a successful event for the providers and users of GTL technologies to be updated and to compare notes. GTLtec 2007 should be no different."

Willem de Meyer, VP New Ventures, PetroSA

"GTLtec 2005 in the "GTL Capital of the World" attracted many participants from all over the world. Technical experts, key persons and scientists from international technology companies enjoyed hospitality and interest of QP officials, they could exchanged experience and looked up to the professional organization of the conference."

Gerhard Beysel, Business Development Manager Air Separation Plant, Linde Gas & Engineering

"As in previous years the GTLtec conference 2005 turned out to be a most valuable forum. Valuable and informative as both the status as well as future trends of the emerging industry were discussed. Sure something I will try to attend in 2007 again."

Hans-Joachim Mueller, Group Vice President - Catalytic Technologies, Sud-Chemie AG

"It was a great conference and we were very pleased to support it as a Platinum sponsor"

Malcom Wells, Communications Manager, Sasol Chevron

"GTLtec 2005 proved to be top flight, with all the major companies pursuing GTL project developments in attendance, both presenting and exhibiting.

It was a great opportunity to get the latest information on project developments, make connections with key players in the industry, and enjoy the hospitality of Doha."

Doug Heatwole, Principal, Ecology & Environment, Inc.

"Have attended the past 3 GTLtec conferences. Each was immensely valuable to me in understanding GTL technology and the imminently huge impact it is going to have on all of us globally in the next 10 years. The opportunity to meet so many senior GTL technology leaders from the world's biggest Oil companies, EPCs and consultants is an opportunity that every person serious about GTL will deeply appreciate."

Sam Sivaskandan, Sales Director, Global Projects Emerson Process Management Asia-Pacific (Fisher Division)

"The set-up and content of the GTLtec2005 conference provided a splendid opportunity to meet colleagues and friends from Qatar and many different parts of the world in one place. The programme was enlightening with the many different perspectives being presented.

It was great to experience that our own commitment to this industry is shared passionately with so many others, big or small."

Jorgen Nergaard Gol, Director Marketing & Sales Technology Division, Haldor Topsoe A/S

"The GTLtec Conference provided a great venue for the latest information on the emerging GTL industry."

Lynn Juarez, GTL Process Technology Manager ExxonMobil Qatar GTL Limited

"...thank you for organizing the impressive GTLtec2005 conference, which was an excellent opportunity for all participants to exchange information with many international companies working in GTL industry"

Amr el halaby, Gas Pipelines Projects Dept Manager Egyptian Ministry of Petroleum

Workshop Leader

Dr Rafael L Espinoza has been involved in the field of GTL for most of his professional life. He was director of Fischer-Tropsch (FT) R&D at ConocoPhillips (2000-2005) and responsible for the technical development of the FT and Hydroprocessing technologies, including catalyst development and preparation scale-up, modeling, process development, reactor technology and products.

At Sasol (1986-2000), he had the positions of Sasol Research Fellow, Manager of Basic Catalysis Research and Sections Leader for high and low temperature FT at the Process Development Dept. Some of the projects in which he was involved include the development of catalysts for Slurry, Fixed and Fluidized bed reactors, development of a Slurry bed reactor for FT (coordinator 1986-1989), commercial plants support, optimization of conceptual designs for new FT plants, optimization of the configuration of the Sasol plant in Sasolburg, etc.

Dr Rafael was also Sr. Chief Research Officer at CSIR in South Africa where he worked on catalyst development in the fields of acid catalysis, supported transition metals and FT.

He has numerous refereed papers and over 35 granted US patents in the GTL field. In 2005 he started his own consulting company & is also a consultant for Syntroleum.

Dr Rafael will be assisted by Jeff Braden

Jeff Braden is currently Director of Sales & Marketing, Süd Chemie's Refinery Catalysts (which includes GTL/CTL products) in the Americas. During his 23 year career with Sud-Chemie, held a variety of positions including: R & D Chemist and group leader, Manufacturing Process Control Manager, Product Development Manager, and Production Manager. Jeff has participated in several successful developmental and scale-up projects relating to GTL/CTL.

Workshop Objective

After a period characterized by only few companies and catalyst suppliers willing to commit the large amount of resources necessary to implement GTL commercial plants, we are on the threshold of a new stage in the field of synthetic fuels.

This new stage is characterized by more players, who have entered a field maybe new to them, and covered with many patents, papers and claims. It is therefore expected that the new players (technology developers, users and catalyst suppliers) will spend a significant amount of time and resources towards achieving clarity in the field and to identify the best project directions, suitable to their specific needs.

This workshop is oriented to the identification of the current technical status of the GTL technology. That is, what has been so far achieved, which aspects seen as technical challenges only a decade ago have now been solved, and what remains to be done.

Because the catalyst is one of the most important variables in the GTL technology, some catalyst specific issues to be covered are the current trends in catalyst development and the relationship between the technology developers and the catalyst suppliers.

Since the Fischer-Tropsch reactor plays an important role in the catalyst development, a comparison between fixed and slurry bed reactors will also be covered in the workshop.

In this way, we expect to provide some clarity about the current state of the technology and to contribute towards its successful development and implementation.

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Exploration and Production

ExxonMobil holds exploration rights to 109 million undeveloped acres in 37 countries, including leading positions in some of the world's most promising areas. Our resource base consists of 73 billion oil equivalent barrels of discovered oil and gas resources, complemented by industry's strongest portfolio of proprietary technology.

We have underway more than 100 major new development projects and global gas and power marketing activities. These include deepwater projects in West Africa and the Gulf of Mexico and a liquefied natural gas project in Qatar.

Every day we produce more than 4 million oil equivalent barrels of oil and gas in fields extending from West Texas to West Africa and from Australia to Alaska. We work in some of the world's most remote regions and under extreme conditions – in deep seas, arctic ice, deserts and tropical rainforests.

ExxonMobil is also the world's largest non-government marketer of equity natural gas. We have

access to 58 trillion cubic feet of proved reserves and more than 182 trillion cubic feet of discovered gas resources. In addition, backed by proprietary technologies, we are a leader in commercializing large, remote gas resources.

Petroleum Products

By itself, ExxonMobil's downstream business would be one of the world's largest companies. We have interests in 45 refineries in 25 countries, 25,000 miles of pipelines, 32 crude oil and petroleum product tankers and more than 37,000 retail sites in more than 100 countries. In addition, fuels products and services are provided to aviation customers at more than 600 airports and to marine customers at 300 marine ports around the world.

Chemicals

ExxonMobil Chemical is a premier supplier of olefins, polyolefins and aromatics, the basic petrochemical building blocks. The company also has a leading position in a number of specialty businesses. Chemical products manufactured by ExxonMobil are used to make everything from plastic packaging and surgical gowns to auto bumpers and flooring.

Safety and Citizenship

We're committed to protecting the environment and guarding the safety and health of our employees, customers, and those who live in the communities here we operate. In addition, we also strive to be a good neighbor. Around the world, the company and its employees have built homes and hospitals, helped feed orphaned children, and enhanced educational opportunities for millions of people.

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Pearl GTL Project



In July 2006, Qatar Petroleum and Royal Dutch Shell plc (Shell) announced the launch of the world-scale integrated Pearl Gas to Liquids (GTL) project, the largest energy project ever to be executed within the borders of Qatar. The Pearl GTL project includes the development of offshore natural gas resources in Qatar's North Field, transporting and processing the gas to extract natural gas liquids and ethane, and the conversion of the remaining gas into clean liquid hydrocarbon products through the construction of the world's largest integrated GTL complex in Ras Laffan Industrial City. Some 1.6 billion cubic feet per day of wellhead gas will be produced from the North Field and processed to produce approximately 120,000 barrels per day of condensate, liquefied petroleum gas and ethane. The remaining, dry gas will be used as feedstock for a new onshore integrated GTL complex which will manufacture an additional 140,000 barrels per day of liquid hydrocarbon products. The Pearl GTL complex will consist of two 70,000 barrels per day GTL trains and associated facilities. The plant will produce a range of high quality liquid products and fuels, comprising naphtha, GTL Fuel, normal paraffins, kerosene and lubricant base oils. GTL Fuel is the largest component of the product slate and can be used in existing light and heavy-duty diesel engines. With lower emissions at point of use, it can play a major role in reducing local air pollution in cities and provide a strategic diversification of liquid transport fuel for importing countries. Production from the first Pearl GTL train is anticipated to begin around the end of the decade, with the start up of the second train following within a year. Progress has already been made offshore, with seismic data acquisition from the vast North Field, and two appraisal wells drilled to confirm gas compositions. The front end engineering and design (FEED) phase, which required almost a million man-hours, is also complete. The GTL plant is as large and complex as a refinery covering the equivalent of 500 soccer fields. The project demonstrates Shell's commitment to help Qatar realise its ambition to become the "GTL capital of the world", and for Shell to remain a leader in the emerging GTL industry.



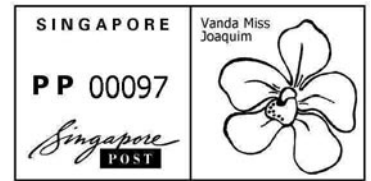
SASOL CHEVRON

Sasol Chevron was established in October 2000 as a 50/50 joint venture to actively pursue commercial application of GTL technology for selected Chevron and Sasol-held reserves of natural gas; third-party gas reserves; and host countries seeking to monetize their gas reserves.

Sasol Chevron is a joint venture between Sasol and Chevron and combines Sasol's world class Fischer-Tropsch (F/T) technologies with Chevron's global resources, experience and complementary technologies in order to develop GTL projects worldwide and produce premium, environmentally friendly fuels.

The joint venture combines Sasol's long track record, of successful synthetic fuel production and related technology development, with Chevron's international presence, global market reach and project resources.

Sasol Chevron is currently pursuing GTL and other gas utilisation opportunities in Qatar as well as providing management, operating and technical services for the owners of EGTL in Nigeria and technical support to the Sasol partner in ORYX GTL. In addition, Sasol Chevron is also engaged in exploring the opportunities for GTL in Australia and Algeria.



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On Day 2, I am attending

Track A OR Track B

Fees: The full Registration Fee includes cost of all sessions, luncheon, coffee/tea & cd documentation.

	1 Person	Group fee for 3 or more* (from the same company)
Regular Fee	USD2,495	USD2,295

* Terms and conditions apply.

Cancellations, Refunds & Transfers: A full refund will be promptly made for all written cancellations 3 weeks before the meeting. Thereafter, cancellations are not refundable. A substitute may be made at any time.
 Photocopy Registration Form to Preserve Brochure Copy. Jan. 2007

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