

## STUDENTS ARRIVE AND REFRESH OMC

Today hundreds of university students are coming to play a part in OMC's constant innovation. Interview with OMC's Program Chairman, Mario A. Chiamonte

The world of energy and oil is rapidly changing. How is OMC responding to these changes? What are the main innovations in the program of OMC 2009?

OMC 2009 is continuing innovations introduced in the preceding edition, following a simple strategy: to deal with the most pressing questions openly, attempting to get to the heart of matters, examining what is going on from all the varying points of view by organizing different events able to attract the most diverse interests, and not only technically.

Once OMC was divided into two distinct parts: on the first morning, the big strategic themes were debated, and then, after the plenary session was over, technology was discussed. In the last edition and

above all in this one, there is more continuity. After the plenary session, the technical sessions begin, with discussion of emerging technologies and their applications, but at the same time a rich series of workshops begin as well. These look at

different problems with debates on current issues, through a very wide lens.

Will you give us an example of the themes dealt with in these workshops?

It is difficult to choose, they are all highly interesting – but I think that the workshop on regasification of LNG is especially significant. The future of this technology in the Mediterranean will be debated, focusing on a strategic matter: are the existing and planned plants sufficient for Europe's future gas needs or could they even exceed the real foreseeable demand for supplies? The question is a crucial one for the future of LNG and of gas equilibrium in the Mediterranean.

What else is new at OMC 2009?

Above all, the welcome return of themes related to exploration. After years when this subject was not discussed at OMC, finally exploration is again a topic. Exploration is increasingly crucial because of the need to replace reserves and there is an extreme need for new technologies able to reduce risk and make possible the discovery of ever more difficult targets.

By bringing exploration topics back to OMC this way, we wanted to make a point



Mario A. Chiamonte,  
OMC 2009 Programme  
Committee Chairman

## Report on opening session

page 3



Franco Terlizzone, director for mining and energy resources at Economic Development Ministry and Hady Fahmy, vice-chairman Egyptian General Petroleum cut the ribbon.

## Interviews

Tallon (Shell) speaks out page 4

Cercato (Eurogip) on CCS page 9

## Focus

Nabucco pipeline page 5

Hydrates, a challenge page 7

with those geologists who say that here we see and talk of iron alone, that is of drilling and offshore structures.

Continues ►

## Computational Flow Assurance Risk Mitigation & Performance Improvement

Flow, Thermal, Stress  
3D Simulation Software & Services

- STAR-CCM+
- STAR-CD
- STAR-CAD Series

EVERY DAY FREE SEMINAR AT OUR STAND AT 11:00 AND 15:00  
Simulation for meeting deep offshore technology challenges  
Contact: [events@cd-adapco.com](mailto:events@cd-adapco.com)

**CD-adapco**  
[www.cd-adapco.com](http://www.cd-adapco.com)

Visit us at  
**OMC 2009**  
Hall B, Stand E37  
to find out more

I owe my sincere thanks to the members of the Program Committee and the team organizing the OMC for having made possible this series of events, a heavy-duty job with results that I consider highly satisfying. Everyone has been extremely cooperative, making concrete contributions. If I had to add something, I would say that I certainly would have liked to organize a workshop about a subject that I consider very stimulating, and that is the use of nano-technologies in the oil sector. This is a field developing rapidly where many players in the upstream world are making big investments and where there is huge potential. The speed of this development is impressive, and its real limits are still unknown. That means that OMC 2011 will give an opportunity to see what is going on there.



**INTERGRAPH**

**The New Wave in Offshore  
Design, Construction &  
Operation**

→ **Take Advantage of SmartMarine® Enterprise**

Share project, schedule and cost benefits through your complete life cycle.

Choose a solution that supports project design through operation, integrating data from design, construction and operation for maximum transparency and project visibility. The resulting cost visualization and information management takes advantage of integrating these applications to give you greater results.

**Optimize and streamline your workflow**

Build project capabilities into profiles and roles, increasing access and use. The resulting integrated business integration interface provides single, easy-to-use data sharing, with improved work processes. The advantage of the smart technology in SmartMarine Enterprise is the work it can save you.

**Share your data with project stakeholders**

Benefits from design, construction and operation data that can be accessed by managers, leading together with operations as part of an integrated data system. Efficient data sharing of the shared business information design, construction, operation, operation, operation, and operation information. The advantage of the smart technology in SmartMarine Enterprise is the work it can save you.

**And increase your productivity!**

**Come and see our latest SmartMarine® Solution  
at ENOC 001**

**HALL B - BOOTH 01**

For more information, please visit: [www.intergraph.com/enoc09](http://www.intergraph.com/enoc09)

## ENI'S REMEDIES AGAINST OIL MARKET INSTABILITY

### Leonardo Maugeri's speech at OMC opening

Oil market stability at a reasonable price is quintessential for sustainable development. But unfortunately there are two main problems to solve in order to achieve that stability.

The first problem is the scarcity of reliable current data about the industry. The second problem is that imposing stability on oil prices is a daunting effort; it is like a sort of Holy Grail that producers and consumers have debated for around 30 years now, without any conclusion.

#### Global energy agency

Eni believes the time is right to establish a new world agency for energy – a sort of Global Energy Agency – within the framework of the United Nations, encompassing all the countries of the world without distinction among consumers and producers. The main task of this new agency would be to collect transparent data on demand, supply, inventories, production capacity build-up, etc., for all countries.

#### Price stabilization

So far, models for establishing oil prices have proven unsatisfactory. Both those based on supply and demand for "physical barrels," and those derived from "paper barrel" trading in the financial markets have proven satisfactory.

Through our CEO, Paolo Scaroni, we have launched – also during the last OPEC International Seminar – a possible framework to deal with this problem.

A possible framework to reach this target could encompass two hypotheses. The first hypothesis entails the possibility that petroleum market dynamics could be stabilized through long-term contracts obliging sellers to provide, and buyers to purchase predetermined quantities of oil and introducing cap and floor prices, as in the case of *Take-or-Pay* contracts in the natural gas sector. The second hypothesis deals with the possibility of establishing a sort of *Global Stabilization Fund* or an *International Capacity Market*, whose main task should be sustaining investments in producing countries that would ensure an adequate spare productive capacity in the world petroleum market. This fund could be fed by a sort of excise tax – like the one that most western governments impose on oil products – imposed by producers and managed by an independent body, such as the earlier mentioned *Global Stabilization Fund*.



Leonardo Maugeri,  
senior executive vice-president Eni

### Reliable partnerships

The ever closer relations between Italy, Egypt and Algeria are based on reliable partnerships. This is the message heard from delegations at the OMC conference inauguration. After the ribbon was cut by Franco Terlizze, director for mining and energy resources at the Economic Development Ministry, and Hady Fahmy, vice chairman of Egyptian General Petroleum, the plenary session started.

"Sonatrach is a reliable partner for Italy", emphasized M. Ali Hached, advisor to the minister of energy of Algeria, listing important projects, like Galsi, carried forward in joint venture with European countries.

Speaking to Staffetta, Ahmed M. Elghaber, senior advisor of Libya's NOC, minimized any risk of nationalization on the part of his country. Rumors are inevitable in a country with direct democracy, he explained, but "unless you see some actual work in that line, I don't think you have to count on it". In response to a query about Opec policies, he said that Libya, as a founding member, followed Opec's decisions, and that in any case price stability would be best achieved if consuming countries propped up prices declining too rapidly. His fellow Libyan, Mohamed M. Oun, chairman of the operative management committee of Mellitah Oil and Gas, observed that even non-Opec countries should do their part for price stability, reducing output when necessary.



### Visit the Baker Hughes Stand and See Live Demonstrations of BEACON Real-Time Advisory Centers



Baker Hughes is pleased to invite you to see BEACON™ demonstrations. A BEACON center provides step-change improvement in wellsite efficiency through expert remote operations support. Baker Hughes is expanding its BEACON center network throughout the world to provide 24/7 wellsite support and manage its key operating assets.

This will be an excellent opportunity to view firsthand Baker Hughes interactive remote operations capabilities and discuss applications for your wellsite operations with our staff.

We look forward to seeing you at our BEACON demonstrations.

Wednesday & Thursday 10:00 • 11:00 • 14:00 • 16:00

Friday 10:00 • 11:00 • 14:00

Form Name: \_\_\_\_\_ Title: \_\_\_\_\_ Company: \_\_\_\_\_ Address 1: \_\_\_\_\_ Address 2: \_\_\_\_\_ Phone: \_\_\_\_\_ E-mail: \_\_\_\_\_





## ITALY'S UPSTREAM, BIG OPPORTUNITIES IN BAD CONDITIONS

Shell Country Chair Tallon speaks out

*Tallon considers Italy's upstream "interesting", and sees that Italy has "great development opportunities in the energy sector", because it occupies "a strategic position midst the flows of natural gas" and "enjoys the precious possibility of increasing significantly the national production of hydrocarbons". All this despite "the complexity of authorization processes and the consequent low competitiveness of the system". In this interview granted to Staffetta, Jean-Pierre Tallon, manager of upstream activities and Country Chair of Shell Italia, explains why his company looks at the Italian upstream with interest.*



Jean-Pierre Tallon  
CEO Shell Italia E&P S.p.A. & Country Chair Italy & Adriatic Countries

### What are Shell's upstream goals?

Shell is the biggest foreign company in Italy with interests in the upstream sector. Our activities are concentrated in Basilicata, where there are the most important oil fields in continental Europe and where Shell is present in two big development and production areas: the Val d'Agri, where Eni is the operator and current production is 85,000 barrels a day, and the Sauro Valley (Tempa Rossa), where the field is under development. As for exploration, as you mentioned, Shell recently completed the acquisition of stakes in six research permits located in the western part of Sicily's offshore ... So we think Italy's upstream is interesting. We think Italy has great development opportunities in the energy sector: besides occupying a strategic position midst the flows of natural gas, Italy enjoys the precious possibility of increasing significantly national hydrocarbon production, thus achieving greater supply certainty.

Development of its energy potential is a declared priority of the country and Shell, as a company operating in this sector, can offer an important contribution in terms of investments, sustainability, social responsibility and respect for the interests of all the actors at work.

**But oil companies do encounter a series of obstacles upstream because of regulatory uncertainty and the excessive amount of time authorization processes take. Little by little, that has diminished the number of operators in the overall production of hydrocarbons in the country. What are the main obstacles you run into?**

The complexity of the authorization processes and the consequent lack of competitiveness of the system. The oil industry is interested in making the investments necessary to increase national oil and gas production and thus make a real contribution to meeting national demand. Yet Italy's complicated regulatory picture, with authorization processes that are often unbearable, reduce the country's competitiveness and its capacity to attract investments.

An example. The so-called first oil – that is the time after the request for authorization necessary to get an oil field to start producing –

is eight years in Italy, more than double the international average. That time period means destruction of value for all the institutional, social, and productive parties involved and drastically reduces the country's attractiveness for national and international investments.

We believe that untying the knot of administrative complexity in Italy, with laws and regulations that have not only a "protective" but also "incentive-producing" function, would represent a significant step forward in development of the opportunities we mentioned.

Clear, simple, and well-defined administrative processes are necessary so that all the parties involved are fully invested in their responsibilities in the modalities, timing and results of their operations.

All this assumes greater importance in the current economic crisis, in that Shell's interest, on the one hand, is to invest in a mid to long-term perspective, but, on the other hand, the timing and nature of investments, and their competitiveness, become a factor.

**The regions, like Basilicata, affected by hydrocarbon extraction are asking for greater environmental compensation. Can common ground be found here?**

As I said earlier, Shell is willing to offer an important contribution in terms of investments, sustainability, social responsibility and respect for the interests of all the actors on the scene so as to develop the country's energy potential. We believe that dialogue and exchanges between the parties is essential and that all the varying aspects of the whole situation be considered, including Italy's competitiveness and ability to attract investments ... And to lay on taxes in this sector at a time when the EU is talking about the usefulness of giving it incentives is certainly anachronistic and does not create a favorable climate.

**Also weighing on the Italian upstream now is the judicial situation. The Potenza magistrate Rocco Pavese has decided to suspend operations at the "Gorgoglione" concession, where Total, as operator, is realizing the Tempa Rossa project in partnership with Shell Italia and**

**Esso. Will this decision have repercussions for you?**

The investigation you refer to is still underway and we do not consider it opportune to comment on it.

**What will your next moves be? Theoretically could you become operator instead of Total?**

In the Tempa Rossa project, Shell's role until now has been as non-operating partner in the joint venture and co-concessionaire in the Gorgoglione concession. As you well know, the current situation is rather unusual for the sector and we are evaluating possibilities.

**Shell is also a leader in the gas sector. In Italy, among other things, you are working with Erg on building a regasifier (here again facing a thousand administrative and bureaucratic obstacles). But could the general reduction in consumption, including that of Lng, bring you to revise your investments in the infrastructures?**

Since 2005, Shell's activities in the gas sector concern natural gas sales for business customers, for thermoelectric operations, for distribution companies and the wholesale market, as well as development of a regasification terminal in Melilli (Siracusa), in partnership with Erg. Our commitment in these two areas continues to be significant. In fact, despite the fact that the current economic slowdown means lower energy consumption, we believe that in the mid to long term, energy demand in Italy will start increasing again. Construction of the regasification terminal would help, moreover, the country's energy security, by making possible a differentiation in gas supply sources, even in crisis situations like the recent one between Russia and Ukraine.

Our project obtained its preliminary feasibility approval in 2006 and the Environment Ministry's Eia decree in September 2008. We have been waiting some months for the Single Authorization from the region of Sicily. Unfortunately, we have no certainty concerning the time necessary to complete the administrative procedure; this all makes it extremely difficult to plan for the mid to long-term, which then affects the final investment decision.

## NABUCCO MOVES UP

On Sunday, EU leaders approved 200mn euro financing for gas pipeline

European Union leaders last Sunday in Brussels gave final approval to investments of 5bn euros in energy and telecom projects, including the controversial Nabucco gas pipeline project. The investments are part of a larger EU economic stimulus program aimed at combating the global economic downturn.

The EU leaders agreed to provide 75bn euros in new loans to the IMF and also to double the EU's crisis fund for member states struggling to cope with the economic downturn. That includes 200mn euros for Nabucco and 1.5bn euros for gas interconnectors.

Last November, EU energy commissioner Andris Piebalgs, after a meeting with Edison Ceo Umberto Quadrino, said about the Itgi Turkey-Greece-Italy pipeline and Nabucco that "the two projects are equally important, even if Itgi is undoubtedly in a more advanced phase, while Nabucco is politically far more ambitious and important".

For the Itgi pipeline, the Turkey-Greece infrastructure already

exists, and lacks only the Italy-Greece connection and an agreement with the Azeris, who must decide to whom they will sell the gas of the Shah Deniz field (which is expected to have 12bn m3, not yet in production).

Quadrino said in that occasion that he was "optimistic about the orientation of the Azeris", who are to reach a decision by the end of 2009. Azerbaijan's president will be in Italy this month to meet with Berlusconi, while next week there will be a meeting in Izmir in Turkey of Italians and Azeris. Edison and the national Greek company Depa are committed, through a joint venture, to construct the last section of the Itgi, 200 km between Greece and Italy, called Igi-Poseidon. The agreement is that 80% of its capacity will be reserved for Edison and 20% for Depa. The two companies have been in negotiations with upstream companies in Azerbaijan for supplies of natural gas for the new pipeline.

Meanwhile, Iran did its part: The "Persian Pipeline" suggested as an alternative to Nabucco to export gas to Europe provides for Turkey's participation and will bring gas to Greece, Italy, and other European countries. Iran announced that if the EU does not want the Iranian gas for the Turkey-Europe pipeline Nabucco, Iran will build an independent gas pipeline. Kasaeizadeh specifies that the Persian Pipeline will cross Turkey and supply "Greece, Italy and other interested European countries".

*Nabucco route*

### Gas interconnectors

Source: Eu

Project	Eu Contribution (Mln euro)
<b>Nabucco</b>	<b>200</b>
<b>Poseidon (Itgi)</b>	<b>100</b>
Skanel	150
LNG Polish coast	80
Slovakia-Hungary	30
Gas transmission system in Slovenia	40
Bulgaria-Greece	45
Romania Hungary	30
Expansion of gas storage capacity in Czech hub	35
Infrastructure to permit reverse gas flow in central and south east Europe	80
Slovakia-Poland	20
Hungary Croatia	20
Bulgaria Romania	10
Reinforcement of FR gas network on Africa-Spain-France axis	200
<b>Galsi</b>	<b>120</b>
Western Axis Larrau-Branch	45
Germany-Belgium-UK	35
France-Belgium	200
<b>Total</b>	<b>1,440</b>



Visit us at hall A, booth A13!

**BAYARDS**  
solutions in aluminium

[www.bayards.it](http://www.bayards.it)

6



## HYDRATES, POTENTIALLY PRECIOUS RESOURCE

Umberta Tinivella, OGS Trieste, explains tech challenge

Within 50-70 years, the problem of energy resources available to us will no longer be limited to round table discussions or seminars of experts: it will be a pressing concrete reality that will touch the daily life of each one of us. Imagine what our life could be if we could use our computers only for limited times according to fixed schedules, or if at a certain hour the lights in our houses went out automatically. Not to mention the problems related to transportation or home heating. For this reason, use of natural gas hydrates is being taken into consideration by various people, first of all as an energy resource, but also because the hydrates represent a possible means of transport for methane. The fact that they are concentrated in the sea means that appropriate instruments and know-how are necessary to find them and determine their location and volume. For that reason, in my research activity at the Istituto Nazionale di Oceanografia e di Geofisica Sperimentale (OGS) I have developed various techniques for acquisition and procedures of inversion, analysis and interpretation of data to obtain the elastic parameters characteristic of hydrate gases and the sediments containing them, parameters indispensable to estimate the concentration of

hydrates and, therefore, their real potential.

### What are gas hydrates

Gas hydrates are composite solids made of water and natural gas of low molecular weight (generally methane), which form in places marked by low temperature, high pressure, and a sufficient concentration of gas. These conditions are generally present on the sea floor at all latitudes. In continental areas, gas hydrates have been found in massive quantities in permafrost: they look like dirty ice and they rapidly dissociate if brought to normal pressure and temperature conditions, releasing methane and water.

### Gas hydrates in the world

The growing scientific interest in these substances is linked mainly to their relevance from an energy and environmental point of view. Gas hydrates are in fact considered a possible energy source in the future, as well as a possible means of transport for methane in hydrate form. Moreover, given their high methane content (methane is a gas with a strong greenhouse effect), they may have an enormous importance on climate if they should dissociate. Not least is their role in the stability of underwater slopes and the devastating effects (as for example underwater landslides) that could occur if a great quantity of gas hydrates dissociate

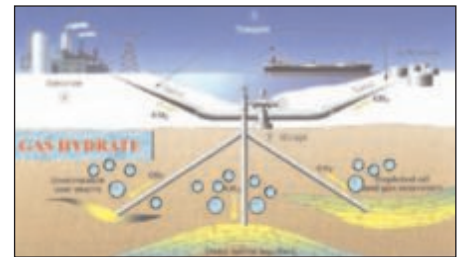
because of variations in pressure or temperature conditions, which can be caused by natural or man-made phenomena. For these reasons, remarkable efforts have been made by the scientific and oil community to discover hydrate reserves and to quantify the methane fields trapped in sediments. Seismic reflection and refraction techniques are by far the best method for these purposes. In fact analysis of seismic data makes it possible to interpret and translate three-dimensional seismic volumes into volumes of concentrated gas hydrates and free gas, supplying information on the regional level both of their location and of the quantities of methane trapped in the sediments.

Finally, hydrates have been considered as the possible reason for devastating natural disasters like the mysterious disappearance of ships and planes in the Bermuda triangle.

*Umberta Tinivella\**

\*Italian National Institute of Oceanography and Experimental Geophysics, GDL Dept

*Hydrates and CCS*





**Our group: 3 in 1 synergy**





**SPECIALISTS in SUPPLYING INDUSTRIAL PLANT  
ENGINEERING MATERIALS**

A complete system of products: **ELECTRICAL CABLES**,  
products for **EXPLOSION PROOFING**,  
**GROUNDING** material, urban and industrial **LIGHTING**,  
**CABLE TRAY SYSTEMS** and **SAFETY** material.

An assortment created for our interlocutors who design, build,  
assemble and maintain industrial plants in the **CHEMICAL**,  
**PETROCHEMICAL**, **OIL & GAS** and **ENERGY** sector.



www.spinagroup.com

**SPINA GROUP**  
FOR INDUSTRY AND ENERGY

Spina Group S.p.A. Via del Solimero 200 - 36100 Verona (Italy) - Tel. +39 045 8600000 - Fax +39 045 8600001

[illegible]

© 2000 John Wiley & Sons, Inc.  
All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without permission in writing from John Wiley & Sons, Inc.

— **James H. Hunt**

© 2004 Blackwell Publishing Ltd  
Journal of Internal Medicine 255: 105–114

[illegible]



## CCS, THE WAY TO GO FOR THE OIL INDUSTRY

Eurogif president outlines hurdles and prospects

OMC this year is dedicating ample space to CO<sub>2</sub> capture and storage. The president of Eurogif, the European association of Oil & Gas service companies, Marco Cercato, tells us why, emphasizing how the oil industry's move towards new technological and environmental frontiers is necessary.

**We have a greener OMC this year, compared to past editions. Why?**

To increase energy supply security, it is necessary to diversify the sources. This is why OMC 2009 is looking deeper into non-conventional energy resources. But it is always necessary to take into consideration fossil fuels in as well, and oil and gas in particular, independently from their market price.

**Why a workshop specifically on CO<sub>2</sub> capture and storage?**

Upstream activities can do a great deal to limit CO<sub>2</sub> pollution through its storage in depleted oil fields and deep aquifers, or by increasing the oil recovery of wells in production.

**What are the main problems in CCS?**

First of all, a very high percentage of CO<sub>2</sub> emissions, besides those occurring in nature, is not from oil fields, which in any case may use them directly, but is from urban and industrial infrastructures, from power plants and transportation. In addition to the

problem of CO<sub>2</sub> capture at production, for which there are ever more efficacious techniques, there is also the problem of transport to storage and then injection underground. Then the quantities: we are talking of millions of tons that, once captured, must be confined. Despite countries, especially those of the EU, giving themselves ambitious CO<sub>2</sub> and greenhouse gas limitation goals, uncontrolled increases from developing countries mean that a substantial CO<sub>2</sub> reduction globally is impossible. Moreover underground storage may be valid even for a longish period, but it is always temporary, and then the costs of capture and sequestration must be considered. I like to think there may be a discovery of some large-scale use of CO<sub>2</sub> as a basic material for some production, that may represent the definitive solution – but it is a long way off. It would require hard research, with uncertain and even improbable results, but given the extraordinary importance of the matter, I think that it should get incentives.

**How might the stored CO<sub>2</sub> be used?**

Scientists are experimenting with various solutions. There might be some success in experiments combining hydrogen with the CO<sub>2</sub> separated out of the smoke of electricity power plants, which would make it possible to produce a fuel usable in the combustion processes themselves.

**Are some places in the Mediterranean more**



Marco Cercato, Eurogif president

**appropriate than others for storage?**

Certainly; in addition to various land sites, exhausted gas fields especially in the Po Valley. Others have been found in the "deep saline aquifers" offshore the Adriatic and Tyrrhenian coasts. These have been indicated as the most appropriate and secure for definitive CO<sub>2</sub> storage.

**You are the president of Eurogif, the oil industry service companies' association. How is it that you have taken on the theme of CCS?**

I believe that the operations related to CO<sub>2</sub> capture and storage can offer new opportunities to companies, especially small and medium size ones. In our country there are many small enterprises, specialized and highly capable ones, which have grown in E&P activities through the years. This patrimony of national know-how, which employs 25.000-30.000 people, is now threatened by extinction because of slower business. It is not a good time for Italy's upstream. These enterprises must find ways to keep active and productive, lest their precious know-how is lost and will no longer be available when it is needed.

**DRILLMEC**  
DRILLING TECHNOLOGIES

**HYDRAULIC DRILLING RIG HH102**

**High Safety, High Performance**

EXHIBITED IN THE  
OUTDOOR AREA

DEMONSTRATION TIME:  
10-12 / 14.30-16.30

12, Via 1° maggio 29027 Ganga di Podenzano (PC) - Italy  
+39 0523 364211 - info@drillmec.com - www.drillmec.com



## CO<sub>2</sub> CAPTURE, THE PATH OF TECH TRANSFER

Energy sustainability today is often a world of technological challenges of gigantic proportions, where those who can link engineering rigor to creativity win by knocking down the cultural barrier of 'not invented here'.

Cutting emissions has become the common goal, and in the context of OMC2009, it seems significant to observe the fact that various oil companies are today reviewing their extraction and transport processes to make them more sustainable.

Among renewables, production from geothermal sources is a frontier with great potential and it has been explored relatively little: Altran Italia is at the center of this exploration.

Among the processes of CO<sub>2</sub> reduction, a primary role is that of Carbon Capture Sequestration (CCS), where the greater margins for increasing profitability of investments are technologies for CO<sub>2</sub> capture. It is enough to think that the cost of capturing a ton of CO<sub>2</sub> is about six times that of its sequestration.

Once again, the challenge is technological and the winning strategy could be that of

setting aside techniques born for purification of industrial gases, to come up with completely new and focused approaches.

The energy world, and especially that of Oil & Gas, has remained isolated for a long time, looking inward and developing an extraordinary but certainly sector-bound culture.

Now there is space and a need for innovation for technological transfer into the Oil & Gas world. From materials developed for the military and aerospace sectors, to tools for satellite surveillance, to telecommunications technology and biotech. Many of the challenges we have spoken of in this article have potential solutions transferable from those fields.

This is the focus of the second workshop that Altran Italia is holding at OMC2009, creative innovation around CO<sub>2</sub> reduction, where the problem of CO<sub>2</sub> is taken as an example for illustrating a method of innovation through technological transfer that we came up with to encourage the birth of ideas of breakthrough innovation among persons of a technical or scientific background.

**Giordano Pinarello\***

*\*Deputy director Eilis division- Altran Italia*

### Geothermal plant in Livorno

Looking for alternative and efficient solutions for electricity production is a challenge for all the companies in the sector. Italy's national electricity company Enel has asked Altran Italia to improve the efficiency of energy production by low enthalpy geothermy.

**The process consists of extracting water at a temperature under 90°C. This process is advantageous thanks to minimal pollution, with a resource which is renewable and available on each continent.**

### Bamboo captures CO<sub>2</sub>

Growing bamboo makes it possible to preserve the soil and to capture CO<sub>2</sub>. Altran Italia has awarded Francisco Gallo a prize for a project where the composite end-product stores carbon absorbed by the bamboo. Bamboo fibers, used as basic material for the creation of a new generation of composite, are at the core of the project. The complex assembling of these fibers with other materials (glue) allows for the production of efficient and cheap building boards. One of the obstacles is the development of production equipment whose costs are sufficiently low to meet the local economic reality.

**SEACON**  
 Leaders in High Performance Fiber Optic Connectors

SEACON Advanced Products, LLC  
 +1 (973) 865-8845  
 www.seacon-usa.com

SEACON Europe  
 +44 (0) 1480 807191  
 www.seacon-europe.com

SEACON Global Production  
 +65 (654) 828-2728  
 Tel: +65 (654) 828-2728  
 www.seaconglobal.com

Exhibiting at OMC 2009 - May 20th - 21st - Pavillon 1007 - Booth 4N17



# Staffetta Quotidiana

## Staffetta News

Staffetta Quotidiana serving the energy community for over 15 years, with over 100,000 readers a year, Staffetta Quotidiana is the only Italian daily dedicated to oil, gas, power and other energy sources. It keeps operators informed with breaking news as it happens, offer latest reports, statistics and articles updated daily, archives accessible by word search, documentation, comments, links and much more. The daily is available in print and in a real time web-based version.

Staffetta News offers each week a complete full survey of what's going on in the Italian energy sector: oil, gas, power, renewable resources, the environment, absolutely necessary for anyone who wants to know about Italian energy markets.

Staffetta News is based on expertise acquired in more than 15 years of Staffetta Quotidiana journalists' experience in the field. It publishes the latest energy statistics (consumption, prices, imports, etc.) with sections devoted to companies' activities in Italy and to Italian companies' activities abroad.



[www.staffettaonline.com](http://www.staffettaonline.com)



### Staffetta News online

Offers the following features:

- breaking news as it happens
- latest articles weekly
- complete Staffetta News archives accessible by word search
- weekly news collected in ready-to-print PDF format
- statistics update as available
- documentation
- comments and much more

Ask for a two-week free trial on our web site:  
[www.staffettaonline.com](http://www.staffettaonline.com) (Italian)  
[www.staffettanews.com](http://www.staffettanews.com) (English)

**STAFFETTA QUOTIDIANA**  
 L'ESPRESSO DELL'ENERGIA ITALIANA



## TODAY'S AGENDA

09.00

### EXHIBITION OPENING

09.00 - 12.45

### WORKSHOP

- Energy from Methane Hydrates: Resource Potential and Technology Challenges
- Regasification in EU: over or under Capacity?
- Ionian Sea and Margins: Recent Prospections and Interpretations

09.00 - 10.45

### SESSION 7 - ROOM A

#### Drilling & Completion (2)

- A STEP-CHANGE REAL-TIME DIRECTIONAL DRILLING DIGITAL INTERFACE
- WELLBORE STABILITY, STABILIZATION AND STRENGTHENING
- THE RIGHT PEOPLE, PROCESS AND TECHNOLOGY: A FORMULA TO THE VALUE-ADDED
- SUCCESSFUL OPERATIONS FOR SUB SEA HIGH-PRESSURE LINES TO ENHANCE CAPACITY AND PROLONG LIFE
- BARITE SAG IN INVERT EMULSION DRILLING FLUIDS - (ALTERNATE)

### SESSION 8 - ROOM B

#### Reservoir Characterisation & Management (2)

- PETROPHYSICAL CHARACTERIZATION OF THIN LAYERED RESERVOIRS: A CASE HISTORY FROM THE ADRIATIC BASIN
- IMPROVING RECOVERY WITH ADVANCED FORMATION EVALUATION AND WELL PLACEMENT TECHNIQUES IN THINLY LAMINATED SAND-SHALE RESERVOIRS
- A NOVEL PROCEDURE TO LOCALLY ASSESS WETTABILITY REVERSAL IN CARBONATE ROCKS BY MAGNETIC RESONANCE IMAGING
- NEW METHOD FOR ENHANCING THE VERTICAL RESOLUTION OF NUCLEAR MAGNETIC RESONANCE DATA CALIBRATED TO CORE ANALYSIS AND RESISTIVITY IMAGING DATA FOR IMPROVED QUANTIFICATION OF RESERVES IN THINLY BEDDED RESERVOIRS

### SESSION 9 - ROOM C

#### HSE - Environment (1)

- IMPACT OF TWO OFFSHORE GAS PLATFORMS ON THE SURROUNDING BENTHIC COMMUNITIES (WESTERN ADRIATIC SEA, ITALY)
- SUSTAINABLE OFFSHORE OIL AND GAS INDUSTRY: GUIDELINES FOR AN EFFECTIVE ASSESSMENT OF IMPACTS ON MARINE ECOSYSTEMS
- MITIGATING FOR CONSTRUCTION IMPACTS OF AN OFFSHORE PIPELINE IN THE GULF OF MEXICO
- THE USE OF UNDERWATER VISUAL CENSUSES TO STUDY FISH DIVERSITY ASSOCIATED WITH OFF-SHORE PLATFORMS
- SIMULATION OF FLOW AND MOTION OF LIFEBOATS - (ALTERNATE)

10.45 - 11.00

### COFFEE BREAK

Sponsored by ROSETTI MARINO

11.05 - 12.45

### SESSION 10 - ROOM A

#### Drilling & Completion (3)

- SAND CONTROL IN MEDITERRANEAN SEA GAS FIELDS

#### COMPLETION STRATEGY

- THE PREVENTION AND CURE OF BIT BALLING IN WATER-BASED DRILLING FLUIDS
- STATE-OF-THE-ART AND FUTURE CHALLENGES OF SAND CONTROL EXPANDABLE SCREENS TECHNOLOGY FOR UNDERGROUND GAS STORAGE WELLS IN DEPLETED UNCONSOLIDATED SANDSTONE

- BARITE SAG IN INVERT EMULSION DRILLING FLUIDS

### SESSION 11 - ROOM B

#### Reservoir Characterisation & Management (3)

- NOVEL EVALUATION METHODS OF UNCONVENTIONAL GAS PRODUCTION FOR OGIP, AND PROXY FORECAST MODELS
- AN ALTERNATIVE METHOD FOR HORIZONTAL & MULTILATERAL PRESSURE TRANSIENT ANALYSIS
- DETERMINATION OF GAS VISCOSITY AND DENSITY USING GENETIC PROGRAMMING

### SESSION 12 - ROOM C

#### HSE - Environment (2)

- ECOLOGICALLY SUSTAINABLE DEVELOPMENT OF OIL AND GAS OPERATIONS: BIODIVERSITY STUDY TO IDENTIFY THE ROLE OF PLATFORMS IN OFFSHORE ENVIRONMENT
- BIO-REMEDIATION OF PETROLEUM CONTAMINATED SITES (Case study)
- OIL-SERVICES IN A CO<sub>2</sub>-REDUCTION CONSTRAINED WORLD
- ROLE AND BENEFITS OF KEY PERFORMANCE INDICATORS (KPIs) IN DRIVING HSE MANAGEMENT SYSTEM IMPROVEMENTS
- DETECTION OF GAS LEAKS - (ALTERNATE)

12.45

### WORKING LUNCHEON

Sponsored by PROGER

14.00 - 18.00

### WORKSHOP:

- Excellence in Maximising Value from Mature Assets
- Competitiveness: What Future in the E&P Industry?

14.30 - 15.40

### SESSION 13 - ROOM A

#### Offshore Technologies (1)

- NEW WAY TO USE PIPES FOR SUBSEA SEPARATION IN DEEPWATER DEVELOPMENT AND QUALIFICATION OF A NOVEL GAS/LIQUID SEPARATOR
- IMPACT OF GEOHAZARDS ON MEDITERRANEAN DEEPWATER DEVELOPMENTS
- NOVEL COMPOSITE PIPE-IN-PIPE SOLUTION FOR ULTRA DEEP WATER FIELD DEVELOPMENTS
- SUBSEA HOT TAPPING FOR NEW PIPELINE TIE-IN - (ALTERNATE)

### SESSION 14 - ROOM B

#### Looking for New Reserves (1)

- ARCHITECTURE, SEDIMENTARY INFILL AND PETROLEUM POTENTIAL OF THE ALGERIAN OFFSHORE
- THE ALGERIAN OFFSHORE - AVAILABLE DATA, EVALUATION AND PROSPECTIVITY
- DEPOSITIONAL CYCLES AND TECTONIC - SEDIMENTARY FRAMEWORK OF SERRAVALIN TERTIARY CLASTICS IN THE NE PROVINCE OF THE NILE DELTA - EGYPT
- HYDROCARBON EXPLORATION UNDER THRUSTED ANTICLINES, SALT DIAPYRS AND TECTONIC NAPES
- HINTS ON PRE-MIOCENE CARBONATE POTENTIALITY IN PETROBEL & NEARBY CONCESSIONS, CENTRAL PROVINCE, G.O.S, EGYPT - (ALTERNATE)

### SESSION 15 - ROOM C

#### Sustainable Development (2)

- ENI NORTH AFRICA'S ENVIRONMENTAL PROGRAM IN LIBYA: SERVING SUSTAINABLE DEVELOPMENT THROUGH SOCIAL INVESTMENT IN LOCAL HUMAN CAPITAL ENHANCEMENT
- SUSTAINABILITY METRICS AND ECOLOGICAL FOOTPRINT OF DIFFERENT SOIL REMEDIAL SCENARIOS: APPLICATION TO A CASE STUDY
- VOLATILITY OF OIL AND GAS PRICES AND STRATEGIES TOWARDS A STABLE MARKET
- HEALTH SURVEILLANCE - THE CENTRE OF THE HEALTH MANAGEMENT SYSTEM

15.40 - 16.00

### COFFEE BREAK

Sponsored by ROSETTI MARINO

16.00 - 18.00

### SESSION 16 - ROOM A

#### LNG in the Gas Value Chain

- INTEGRATED GAS-LNG PROJECTS
- DEVELOPMENT OF AN INNOVATIVE METHODOLOGY FOR LAYOUT OPTIMIZATION OF AN OFFSHORE LNG TERMINAL
- DEVELOPING MEDIUM-SIZE GAS RESERVES WITH FLOATING LIQUEFACTION PLANTS
- COST-TO-BENEFIT ANALYSIS OF MANAGEMENT STRATEGIES OF OFFSHORE STRUCTURES FOR LNG AND OIL RECEIVING FACILITIES
- LNG OPPORTUNITIES IN ENI E&P DIVISION: TECHNOLOGIES, LESSONS LEARNED AND PROJECT MANAGEMENT POTENTIAL ISSUES

### SESSION 17 - ROOM B

#### Looking for New Reserves (2)

- RIFTING DYNAMICS OF GULF OF SUZ AND THE EGYPTIAN RED SEA HYDROCARBON POTENTIAL RELATIONSHIP
- GEOCHEMICAL EVALUATION OF PETROLEUM POTENTIAL, SBAA REGION (WEST OF ALGERIAN SAHARA)
- GEOCHEMICAL EVALUATION AND THERMAL MODELING OF THE TERTIARY FORMATIONS OF CHELIFF BASIN AND WESTERN ALGERIAN OFFSHORE
- THE ECONOMIC IMPACT OF EARLY PRODUCTION PLANNING (EPP) ON OFFSHORE DEVELOPMENTS

### SESSION 18 - ROOM C

#### Reservoir Characterisation & Management (4)

- USE OF EVOLUTIONARY ALGORITHMS IN SINGLE AND MULTI-OBJECTIVE OPTIMIZATION TECHNIQUES FOR ASSISTED HISTORY MATCHING
- INJECTION TESTING: AN INNOVATIVE FIELD APPLICATION IN BERKINE BASIN, ALGERIA
- CHDT - CASED HOLE DYNAMIC TESTER FIRST FORMATION EVALUATION APPLICATION IN EGYPT IN WELL BALTIM NORTH - 4
- IMPROVING OIL RESERVES THROUGH OPTIMIZING WATER FLOODING PATTERNS AT FARAS FIELD QATTARA DEPRESSION, WESTERN DESERT, EGYPT

18.00

### EXHIBITION AREA CLOSES

21.00

### GALA CONCERT

Sponsored by SHELL

**STAFFETTA QUOTIDIANA** 

**Today@OMC 2009**

Numero speciale della / Special issue of  
STAFFETTA QUOTIDIANA - 26 marzo 2009 n. 58  
*Petrolio gas elettricità e altre fonti di energia*  
*Oil gas and power in Italy*

Direttore responsabile / Editor in chief  
Goffredo Galeazzi  
Direttore emerito / Director emeritus  
Giorgio Carlevaro  
Direttore editoriale / Editorial director  
Giovanni G. Borromeo  
Pubblicità e marketing / Advertising & marketing  
Paolo Angelini  
Progetto grafico / Graphic layout  
Studio Giano di Fabrizio Pensa - Roma

Editore / Editor  
RIVISTA ITALIANA PETROLIO Srl

Redazione e produzione / Editing & production  
RIP Srl  
Via Aventina, 19 - 00153 Roma (IT)  
www.staffettaonline.com  
info@staffettaonline.com

Reg. Trib. Roma n. 4304 del 7/12/54