

# **Summary**

Letter from the Bord.
Hydrocarbons and competitive advantages.

## **Statistics**

p.6 Oil and Gas in numbers

Statistical Brochure

## **Analysis**

# p.8 Considerations about the future of hydrocarbons in the Argentine Republic.

On September 15, the Second Conference for

Journalists on 'Oil and Gas: the challenges of the decade' organized by the Institutional Relations Committee of the Argentine Gas and Petroleum Institute (Comisión de Relaciones Institucionales del IAPG) took place, where a lecture was delivered on Considerations about the Future of Hydrocarbons in the Argentine Republic by Oscar Vicente, President of the Chamber for Hydrocarbon Exploration and Production (Cámara de Exploración y Producción de Hidrocarburos) as well as Director of Petrobras Energy (Petrobras Energía). The main purpose of the presentation was to show the relation between different political events and the results achieved as a consequence of a particular energy policy. At the same time, to show also a general view of the hydrocarbon industry that, in the last decade, has had investments of more than 22 billion US dollars, which were increased to more than 40.8 billion US dollars if one takes into account the transport, distribution as well as the

energy sector in all its phases; also, the necessary conditions for a total renovation. An adaptation and p.40

By Oscar Vicente

#### Fuels

# p.20 Quality of liquid fuels

summary of the presentation.

During the II Hydrocarbons Congress held in Buenos Aires mid-year, there was a round table where the 'Quality of Liquid Fuels' (Calidad de los Combustibles Líquidos) was discussed with the participation of Messrs. Hugo Caldini, Coordinator of the National Fuel Program of the Energy Secretariat; Juan Morrone, from the Automobile Manufacturers Association (ADEFA); Roman Echenique, Petrobras Quality, Safety and Environment and Occupational Health Manager; Juan Carlos Díaz, Director of Operating and Supply Planning of Repsol YPF for Argentina; Daniel Risso, Manager of the Esso Refinery in Campana; Federico da Costa Kremer, Petrobras Product Development Manager (Brazil). Blas Vinci of Shell p.56 was the conference moderator. At this meeting, a thorough investigation of the

subject was made; these studies included legislation about liquid fuels and their current situation, new engine technologies and their approach to sulfur content in liquid fuels, quality of fuels and the current milieu, necessary investments in the refining processes for improving fuel quality as well as the process of adjustment of fuel quality that is taking place in Brazil. Recent Resolution 398/2003, where the specifications as from January 1, 2006 are stated, was made known to the public.

# $p.54 \left| \begin{array}{l} \text{Price of fuels and other energy products for} \\ \text{domestic consumption} \end{array} \right.$

The IAPG Commission for Gas Transport and Treatment has prepared a comparison table of fuels and other energy products for domestic consumption, which is contained in this edition. The above details prices of charcoal, wood, gas-oil, gasoline, kerosene, methyl alcohol, LPG, natural gas, electricity, CNG and others such as crude oil and fuel oil.

By the IAPG Commission for Gas Transport and Treatment



### Mercosur

# Mercosur - legal and regulatory aspects of the industry

During the II Hydrocarbons Congress held in Buenos Aires mid-year, there was a round table where the 'Mercosur - legal and regulatory aspects of the industry' (Asuntos legales y regulatorios de la industria en el Mercosur) were discussed. Messrs. Raúl García (Consultant), Raúl Bertero (Freyre y Asociados Consultant Partner) and Rubén Sabatini (Pluspetrol Legal Department Manager) participated in the table. Eduardo Zapata (Consultant) acted as moderator. In this round table, the regulatory aspects of the exports of natural gas, the 'Gas System' and its agenda as well as the standardization of regulatory frames were addressed. An adaptation and

#### Considerations

#### Some considerations. The game changes

Petrobras announced a series of oil-strikes in their sea littoral, especially in the Santos Basin, where

summary of the different presentations follows.

69 MMm<sup>3</sup> of prime quality light crude (still at the appraisal stage to be subsequently declared commercial) and 419 billion m<sup>3</sup> of natural gas (15 TcF) were produced, of which 70 billion m<sup>3</sup> were declared as potential reserves in April 2003. Meanwhile, the last events in Bolivia raise uncertainty about the future circumstances of the Southern Cone scenario.

By Eduardo Rocchi

# **Energy**

#### p.58 Energy matrix, biomass and confusion

In the previous Petrotecnia issue a paper under the title of 'The energy mix of developing countries' was published on the subject of the study carried out by the French Petroleum Institute (IFP) which was presented at the '2003 Outlook' Yearly International Conference last February. This study analyzes primary energy sources and their future in four countries selected for this purpose: Brazil, China, India and Nigeria. Nevertheless, the statements made for this occasion have a serious omission: as in many cases, a primary resource such as biomass has been sidetracked creating a confusion that we are trying to overcome.

By Roberto E. Cunningham

# **Upstream**

#### p.62 Regulations and their proper application. Abbreviations for oil wells.

On November 19, 1969 the Executive Power issued Resolution No. 59 (E). This resolution regulated, within the framework of Hydrocarbons Law No. 17319, the 'Classification and Nomenclature Code of Oil Wells' (Ministry of Economy, 1969/70).

The above law became effective after the Official Bulletin publication on January 19, 1970. The incorrect use of the codes can result in serious mistakes. In fact, these abbreviations are extremely important as we could be referring to 2 or 3 wells in the same basin, either productive or abandoned. This could happen if the correct abbreviation codes were not written properly.

By Daniel E. Robles

## p.68 Co-occurrence of undersaturated oil and a gas cap

The technical paper titled "Co-occurrence of undersaturated oil and a gas cap - Carbon dioxide balanced by heavy oils" was presented at the 2003 II Hydrocarbons Congress held in last July. The publication of this paper was suggested by the IAPG Production Committee on account of its contents

The paper reviews a heavy oil reservoir (< 20° API) which exhibits significant undersaturation despite being in contact with a conspicuous gas cap.

> By Marcelo Crotti (Inlab S.A.) and Matías Fernández Badessich (Repsol YPF)

### Soil reclamation using the cation exchange technique

This paper addresses a study designed for reclamation of soils salinized as a result of the release of production water, using the cation exchange technique. Data from the early stage. i.e. the laboratory studies, are presented. Soil columns are formed to define physical-chemical soil properties and assess soil reclamation possibilities by use of chemical improvers and successive washing operations. The soil under study exhibits saline-sodic characteristics and a 50% PSI. Soil clayey particulate are completely scattered and make up a hard and compact surface layer which prevents vegetation growth. Laboratory tests showed that adding a chemical revision, in accordance with the guidelines of the Saline and Sodic Soils Handbook proposed by the United States Department of Agriculture (USDA), and subsequently washing the soil reduces the PSI to less than 15%, which value should not be exceeded to prevent soil structure and quality deterioration. Based on the results of this preliminary study, a pilot study was conducted over a five-hectare salinized area.

By Cecilia López, Silvina Videla, and Eduardo Ercoli (Bioprocess Laboratory, School of Engineering, National Cuyo University, Mendoza), and Cecilia Calleja and Oscar Segura (Loma La Lata Field, Repsol YPF, Neuquén).

#### Memories of the oil and gas world p.84 Real life stories.

#### Domingo Jakúlica, the jungle geologist.

Dr. Domingo Jakúlica "Yugo" (82) worked as an oil exploration geologist, particularly in the Argentine tropical forest. In 1941, he won a scholarship granted by YPF as a Geology student and his professional activity started in 1945 in the north of the Province of Salta as a member of Geological Crew No.5. In 1954, he left YPF to dedicate himself from then on to the study of tropical agriculture in the north of Salta and, so as not to forget his first vocation, to the teaching of Oil Geology. Also, he became actively involved, not only as a professional but also as a teacher, sportsman and public person. He is a gentleman of vast culture with a wide knowledge of the most diverse subjects and 'of a generous, extroverted and happy attitude' as he has been depicted in many interviews.

A summary of the different witnessing documents about this real pioneer of northern Argentina known by the nickname of 'Yugo' follows.

### News

- D.83 News from Houston
- p.90 Company News
- p.98 IAPG News