

The Argentine Petroleum Institute's Technical Committees Providing Non-Stop Support



Controlled by the Assessment Committee of the Argentine Institute of Petroleum, the Technical Committees do a professional job of research, drawing up plans for maximising the effectiveness of an industry which is very important to the country. Their activities include exploration, exploitation, engineering, refining, sales, process engineering, and related interdisciplinary work ● Petrotecnica presents them today to the members of this 13th Congress, convinced that they are the core of what the Institute does.

THE LEGAL AFFAIRS COMMITTEE

Handles matters involving petroleum law, as it relates to the national, provincial and municipal administration of justice. Analyzes all legal procedures regarding contracts, both commercial and those involving partnerships.

THE TRAINING COMMITTEE

Responsible for drawing up the Plan for the Training Scheme offered by the Argentine Petroleum Institute, both at its Headquarters and its five branches throughout the country: South, North, Cuyo, Comahue and Austral. An outstanding group of technicians and professionals annually develop a program

of courses and seminars, aimed at training all those connected to the oil and natural gas industries.

THE CONSERVATION COMMITTEE

They prepare documents and process information relating to the broad guidelines the industry itself lays down for protecting the environment.

At the moment this Commission is developing a technical study, Treatment and Disposal of Solid Waste, and is producing, along with the Petroleum Economy Committee, a study on the development and environmental impact of compressed natural gas in Argentina.

A synopsis presented to the organizers of the fifteenth Congress of the World Energy Council was accepted, and the final

text is being completed, ready for presentation in Madrid in September 1992.

THE CORROSION COMMITTEE

The aim of this Committee has been, from the start, to deal with subject-matter determined by the Institution, satisfying the IAP's requirements in matters concerning corrosion and protection, as well as contributing to that body's training programmes.

Its goals are providing information about corrosion problems and promoting an anti-corrosion mentality in the gas and petroleum industries.

Other activities include translation of technical material and articles on the subject, as well as organizing conferences and technical lectures by leading experts on corrosion and its control.

At the moment the Committee is involved in translating the handbook on Corrosion Control by A.W. Peabody, published by NACE.

THE OIL ECONOMY COMMITTEE

Besides specific tasks like planning courses and preparing technical analysis documents, this Committee has produced a study called **Argentine Energy Balance Sheet 1986-1995**, whose aim is to present the structure of the country's energy supply, outlining the demand according to the sector and its source.

From data already obtained, and projections up to '95, the results show that the most significant structural change over ten years is the substitution of oil natural gas for. The study shows the small contribution of hydroelectricity to the energy equation, in proportion to its potential and to the figures for Latin America. Fossil fuels continue to provide 85% of the country's total energy supply, and the average energy intensity, between 1990 and 1995 is a factor of 1.0, which is reasonable for a developing country.

THE STATISTICS COMMITTEE

Maintains permanent contact with the

Statistics Division of the Energy Subsecretariat, taking an active part in the publication, by the Argentine Petroleum Institute, of information processed by that body.

The Committee processes updated information from the different areas of petroleum production, and does the same for the gas industry.

For this Congress it has produced a resume entitled **Argentina: Statistics for the Petroleum Industry** which is available at the Argentine stand of the Exposition being held simultaneously with this event.

STUDY COMMITTEE ON ENVIRONMENTAL PROBLEMS GENERATED BY THE EXPLORATION AND EXPLOITATION OF HYDROCARBONS

Bearing in mind the growing importance of the subject at a national and international level, the Committee has prepared a Report: **Protecting the Environment During the Exploration and Exploitation of Hydrocarbons.**

This work has been placed at the disposal of all associated companies for their analysis and discussion. The guidelines which emerge from their contributions, after being studied, are incorporated into the Report.

The Committee also carries out a significant task regarding information and training in all the legal and technical regulations for the solution of problems in this area.

THE EXPLORATION COMMITTEE

The Committee runs courses and seminars for the analysis of the exploration scene, including technical aspects and new developments which enable significant advances to be made in the area.

While reporting about work done and conclusions reached at interdisciplinary meetings, the Committee is currently involved in setting up the Second National Congress on Exploration for Hydrocarbons, as well as the National Geology Congress. When the first of these is ready,

it will take place in the province of Mendoza.

THE QUALITY ASSURANCE COMMITTEE

Created in 1989, it is divided into three Sub-Committees. The Training Sub-Committee holds seminars on information and training for industrialists, managers and technical experts.

The Subcommittee on Costs due to Substandard Quality has as its aim the development of a system for handling costs due to substandard work, which it will apply in users' and manufacturers' pilot schemes. The Standards Sub-Committee is in charge of collecting quality standards, incorporating them into the IAP library and carrying out translations and commentaries. Among its most recent work has been the translation and revision of the fourth edition of the Spec. API Q1/1992.

THE GAS COMMITTEE

The Gas Committee analyses and examines the main subjects relating to the gas industry, which is of increasing importance in the country's energy equation, to the extent that use of gas resources is on a par with that of developed countries.

It has recently published **PNG In Transport**, a study of the development of the National Plan for Replacing Liquid Fuels, and aiming towards the use of pressurized natural gas in transport.

It also includes considerations on the use of PNG in public transport and the application of gas technology for mass transport.

THE COMMITTEE ON INDUSTRIAL HEALTH AND MEDICINE

The Committee is concerned with the study of standards and practices involving Industrial Health and Medicine in Industry, as well as with information and research on different problems related to the subject.

It recently completed a study **Exposure to Alkylates**, in which the effectiveness of preventive measures adopted in handling

of lead additives used as anti-knock in gasoline, both in the mixing plants and in the cleaning and repair of tanks and pipes that have contained leaded gasoline. This effectiveness has been evaluated during the course of 10 years (1981-1990), through health checks on personnel involved.

THE COMMITTEE ON PROJECT ENGINEERING

This Committee has as its fundamental aim to devise, adapt and arrange techniques and procedures to be used in project engineering, with the aim of aiding their development in the area of hydrocarbons and petrochemicals.

This aim is achieved through the drawing up and issuing of Recommended Practices, thoroughly analyzed and discussed in the Committee, with the consensus of specialists in the specific areas.

The subjects to be researched are determined on the basis of needs expressed by the companies connected to the development of Project Engineering. Among the procedures that have been developed are: process engineering, basic engineering and detailed engineering. Materials and dimensions for storage tanks with small to medium capacity. The recommendation for the selection of pumps for general use in refineries, and pipes with different specifications.

THE COMMITTEE ON INSTRUMENTATION AND CONTROL PROCEDURES

This Committee is composed of oil industry professionals, official and private bodies, engineering companies, consultants and supplier, whose main task is the analysis, study and preparation of Recommended Practices based on international standards.

It is composed of two Subcommittees: **Instrumentation and Electrical materials for explosive environments.**

The first of the groups is concerned with drafting Recommended Practices which act as a link between buyer and supplier in order to agree on guidelines to facilitate the purchase of engineering equipment, and speed up bids, providing a common language between the two parties involved. The second Sub-Committee works in relation to equipment, systems and electrical installations required at industrial plants which store, process and transport inflammable substances.

THE COMMITTEE ON LUBRICANTS

This Committee provides an information service about technical work done on the production of lubricants, of new techno-

logical advances in the area. Recently it has issued, a brochure on **Fundamentals On The Lubrication of Your High-Speed diesel engine.** At present the Committee is preparing another publication, **Know the Oil in Your Car's Transmission.**

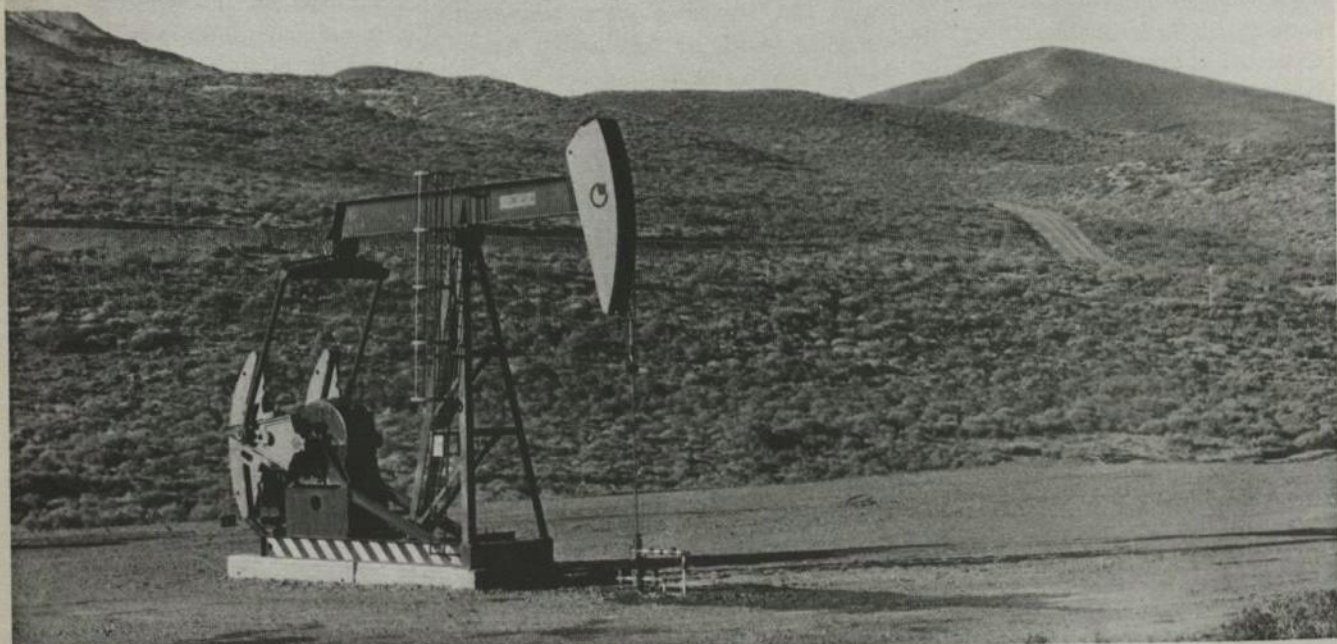
THE COMMITTEE ON MEASURING AND SAMPLING

This Committee is made up of experts in the field of the measurement of oil, oil products and gas, who have completed an intensive programme of standardisation with innovations on a national level.

This work led to the replacement of the IRAM-IAP standards by revised and up to date standard methods for measuring oil products, conversion of densities to 15°C, the use of manual methods to determine the content of tanks. This included the publication of the standards for calibration for road tanker lorries, rotary volume meters for liquid hydrocarbons, geometric calibration for vertical cylindrical tanks with a fixed or floating roof and manual sampling of liquid hydrocarbons.

THE COMMITTEE ON LABORATORY METHODS

This is a team which focuses on and ana-



lyzes concerns and problems arising in laboratories, from the point of view of the latest developments, techniques and equipment. With this material the requisite studies are carried out to establish the appropriate IRAM-IAP standards which will apply on a national scale.

This research is mainly aimed at the petroleum, gas and petrochemicals industries, and all the control standards for the industry make a priority of environmental protection and safety.

The latest work by the Committee includes the IRAM-IAP standards for high purity Ethylene, a method of determining different impurities by gas chromatography systems of analyzing liquefied petroleum gases; gas chromatography assay of natural gas.

THE DRILLING COMMITTEE

This Committee carries out a wide range of activities, but concentrates mainly on providing information on the latest state of the art expertise and setting up meetings to enable a fruitful interchange of technical knowledge on specifics to take place. In the last year, the Committee shared the work at the Latin American Drilling Congress held in Santa Cruz, Bolivia, and organized a Deep Well seminar in Vespucio, Salta.

It has also completed the Spanish version of the IADC's Drilling Manual, and provided strong support for the courses on Blowout Control which enable those with the necessary qualifications to operate locally.

At the same time the Committee is involved in the organisation of Horizontal Wells to be held in November, with the participation of local and foreign experts.

THE COMMITTEE FOR THE PREVENTION OF SEA AND COASTAL POLLUTION

This Committee has as its main objective preparing a Map of Ecological Sensibility which will allow us to understand the riches of the Argentine sea and also the

areas which are particularly vulnerable. A substantial understanding of the ecology of the marine environment and its oceanographic features, physical and chemical, will make it possible to plan the routes of ships, and if need be, take decisive action to combat oil spillage.

To this map of the Argentine continental coast will be added a descriptive manual and a users' manual. There will also be a data bank to aid risk management, in the control of incidental pollution by hydrocarbons.

THE PRODUCTION COMMITTEE

This Committee carries out technical studies on the main aspects of production, both of oil and gas.

The Committee has just published a book on the current situation and future prospects for underground storage of natural gas in Argentina.

The book highlights the completion of a pilot project in the semi-depleted Lunlunta well, in Carrizal, Province of Mendoza. And the negotiations between the State gas utility and the private firm CAPSA to develop storage facilities in depleted gas-bearing formations in parts of the Diadema Argentina field.

It is believed that these projects could mark the beginning of new production, transport and distribution systems for natural gas in Argentina.

THE PUBLICATIONS COMMITTEE

Besides its daily task of coordinating and producing the Institute's publications, this Committee issues the IAP's house journal, *Petrotecnia*.

It contains the latest information about developments, new advances in technology, improvements in equipment, nationally and internationally, in the ever-changing world of hydrocarbons.

THE REFINING AND FUELS COMMITTEE

This is the Committee where petroleum

companies evaluate fuels and set the standards for refining which, in a deregulated market, ensure the user gets the quality he needs.

The technical data contained in the objectives they set are passed on to the national authorities, so they can ensure standards are maintained.

This Committee periodically organises national "Refining Symposia", attended also by foreign experts, to examine prospects and share knowledge.

Every year courses are held, along with meetings in the different specialities, so that experts and those whose job it is to apply expertise can have an exchange of views.

THE SAFETY AND FIRE COMMITTEE

This is a group of professionals working in companies related to the petroleum and gas industries.

Bearing in mind the need to meet and comply with up-to-date safety standards, using the latest advances of technology, the standards applied are based on Law 13660 as it relates to the safety of plant for manufacturing, processing and storing fuels, whether solid, liquid or gas. This is done, too, by a detailed study of decree number 10877.

It has been established that periodic technical advances, which have become law, should also be the standards of IRAM-IAP, and be incorporated as new rules, replacing the ones currently in force.

THE TRANSPORT COMMITTEE

While drawing up documents about transport, the heavy vehicles Sub-Committee is currently working to persuade the National Road Network to relate insurance costs and maximum loads permitted per axle and per wheel to technical studies presented by the Sub-Committee, which make it possible to evaluate the effects of petroleum vehicles on the bituminous surfaces of the nation's roads. The Committee also organizes visits and training courses for transport professionals.