



The Chairman's Corner

Niladri Kumar Mitra
Chairman 2005-06



Dear friends,

It gives me great pleasure to share with you the third issue of SPENDSECnews. The October meeting held at Indian Habitat Centre, New Delhi was a success with good turnout. The section members appreciated very much the Guest Speaker Larry Behrmann's paper on perforating systems and downhole performance.

All over the world, E&P industry is witnessing a change of "paradigms" on a number of fronts – be it technology, or research or training or on issues like oil or gas or other sources of energies, its cost-benefit dynamics and many more. So Oil & Gas industries are passing through a transition phase where peak-oil crisis and sky-rocketing oil prices and several geo-political considerations demands a changed perspective, if one wish to deliver and one wish to maintain their cutting edge or so called lead. The real challenge here is providing technology at an affordable price to make our life simpler and better.

Indian E&P industry, in deed, demands a serious discussion over the changing paradigms. We have witnessed a success story of last three decades. We have seen the failures too.

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December Meeting Announcement

SPE 2005 President to visit
New Delhi Section

Thursday, December 1, 2005 at 1330 Hrs
Venue- Windsor Hall, Le Meridien,
Windsor Place, Janpath, New Delhi

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IPTC Doha-An Experience

Rahul Bali

First International Petroleum Technology conference at Doha, Qatar was held from November 20-23. It was a great "unforgettable" experience.



Attended the International Membership Workshop at Hotel Four Seasons, on November 20 as a Committee member as well as section officer of SPENDSEC.

Also attended the SPE Middle East Council meeting at Sheraton, Doha. The activities of New Delhi section initiatives were well appreciated and I distributed our section newsletter. Brian Wiggins and Ross Davidson mentioned about the efforts of our section and cited examples of hosting our section website and publishing Newsletter. Pakistan section representative Mr. Haq Minhas took a copy of our newsletter to share with his colleagues.



During the course of interaction, met our Regional Director Mr. Ali Jarwan and Mr. Ali H. Al-Hasan Chairperson of Middle East Council, A very

impressive presentation on YEPP in Middle East was made during the meeting.

Our colleague and SPENDSEC member Mr. Partha Mitra also participated in the IPTC. He presented a technical paper and co chaired one of the technical sessions. During IPTC, I attended various Panel sessions and got the opportunity to meet various Industry Leaders from India and other countries. I liked the panel on "Reserves estimates---" the best.

Met with Mr. Giovanni Paccaloni and talked about his forthcoming visit to our section. Another great experience was meeting a group of bright young students from India, who were chosen to attend



Education day at IPTC Doha. Six of them were from IIT Bombay. They expressed keen desire to become SPE Student members. I shared with them the efforts we made to establish an SPE Student Chapter at IIT Delhi. (Submitted the membership forms and application petition for establishing Student Chapter to SPE Middle east staff). They also want to start a student chapter at IIT Bombay. My thanks to Dr. Gopalakrishnan, and Mr. S. Roychaudhury for providing all the support to submit the Application Papers of Student Chapter of IIT Delhi. Ross Davidson indicated that the Student Chapter will get the formal approval of SPE Board very soon.



Calendar of Events

Special Section Events in December

Date: December 01, 2005

Place: Le Meridien, Windsor Place

Time: 1330 Hrs

Speakers: Giovanni Paccaloni (SPE 2005 President), Dr. Ravi Bastia,

David Hawkes, Dr. Said Mufarji,

Date: December 02, 2005

Visit : SPE 2005 President visits IIT Delhi

Time: 1500Hours

January Section Technical Meeting

Date: January 16, 2006

Place: India Habitat Centre, Lodhi Road

Time: 1800 Hrs

Topic: Chemical EOR: The Past—Does it Have A Future?

Speaker: Sara Thomas (SPE Distinguished Lecturer)

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We have done enough of experimentations. In the process we have learned a lot and experience and expertise is on our side. With this, now we have to look forward towards the bigger challenges ahead – maximizing recovery from the aging field, doing the right investments and getting the due returns, improving upon the recovery factor, supplementing the reservoir energy, ensuring surface facilities and equipment healthy for meeting challenges ahead, handling increased water cut, so on and so forth. Each one of these is being pursued in right earnest. What is required now is the change perspective and reciprocation to the changing realities. It requires a holistic understanding and planning of resources at our disposal – technology, finances and manpower. Work force at installations / rigs / plants is ready for deliver. We have to do our bit in unleashing human potential. Towards this, there are several issues which I would like share to excel and deliver in the ever dynamic industry like ours. For India, we need to focus more on the point of technology infusion, its due integration and its adoption. We need to evolve a “Scheduling and monitoring mechanism” at par with international standards. We have to make “Root-cause analysis” a habit of diagnosing, analyzing and reporting. We have to really work hard to establish “System, process and Individual Benchmarking” in current & future perspectives. We have to place all our experiences and expertise on test to produce oil from deep waters of India. We have to acknowledge our constraint as a nation and as an organization and the we have to look for the solutions instead of cribbing around. There are other issues too.

I am confident that each one of us in SPE-New Delhi Section shares similar perspectives. It is the networking platform of SPE where we can look forward for moving ahead on those directions. I hope there shall be a positive reciprocation to the changing realities of oil and gas industries in India and abroad. Looking forward to the contribution from SPE-New Delhi Section and of other sections/chapters in India/Abroad towards this direction.

Wishing the very best to all SPENDSEC members.

*"Dame Petroleum has many suitors;
Each man murmurs, oh! my Queen!
I follow till I make you mine!"
—Anonymous*

Highlights of October Section Meeting

Ajay Dashore

The October Technical cum Monthly Section meeting of SPE New Delhi Section was held on 28th Oct 2005 at India Habitat Centre, Delhi. The meeting was chaired by Ian Galbreath, Schlumberger Asia Services limited.

Rahul Bali, Section Secretary welcomed the SPE gathering. A brief update about the section activities was presented and the new members were introduced. A resolution for the SPE New Delhi Section office bearers for 2005-2006 was proposed and approved by the section members.

Larry Behrmann, Schlumberger Asia Services limited, delivered his paper “After 57 years of perforating, does it



still have a future?”. The paper gave an insight into the background of perforation in early 80's and various perforation processes. An indepth analysis of progress and evolution of different perforation processes over the years was shown. Case studies were discussed in relation to improved well productivity and progress of perforating systems. The audience took keen interest in the presentation and actively discussed their issues on perforating systems and downhole performance.

A certificate of appreciation was presented to Key speaker by Mr. Roychaudhury, Section Director. The next Section meeting will be held on December 1, 2005. The meeting ended with the vote of thanks to the distinguished speaker and invitees by Dr P. Gopalakrishnan.

Glimpses of October 2005



Section Meeting



Deepwater Frontiers - The Future of India

Dr. Ravi Bastia

Vice President (E&P), Reliance Industry Limited

Abstract:

Areas of exploration for new hydrocarbons are changing as the industry seeks new resources for economic and political reasons. It is not easy to know and gauge how much oil we have left, how long it will last and what price we should pay for it. The inflation barometer is already twitching the economic doomsters and scanning the horizons for storm clouds. The geopolitical impact would be in the balance of power between OPEC producers, who largely sit back and watch their oil bubble out of the desert, and non-OPEC producers, where oil is more demanding than far from supply. It is in this context, attention has turned from easily accessible onshore oil to offshore continental shelves. Over the past ten years, there has been a marked shift towards deepwater continental margins (500 -2,500 m water depth). In these more hostile regions, the risk and cost of exploration are higher, but the return is immensely rewarding.

The energy industry's ability to identify hydrocarbon-bearing sediments on the ocean floor at extreme water depths is on flourishing path. In recent years the industry has been moving its operations farther and farther offshore, and into progressively deepwater – successfully making discoveries. They are developed by continuous appraisal and evaluations through rigorous tests, necessary to justify high-cost deepwater projects. The total sedimentary coverage of both the coasts together constitutes 1.8 million sq.km. out of which 1.3 million sq.km falls in the deepwater beyond 400m water depth. The exploration activities till recently was concentrated within the water depth of 100m primarily due to limited technological inputs. Recent discoveries of giant sized oil and gas fields around the world in deep waters have shifted the focus towards the vast unexplored deepwater sediments of Arabian Sea and Bay of Bengal, proximal to the Indian coasts.

The potential of Indian deepwater hydrocarbon is enormous. Exploration and development of these resources will be important in the new millennium. However, overcoming the hurdles of high cost and technological challenge that surround them will not be easy. Successful development of any potential deepwater prospect will require an acceptable mix of favorable reservoir performance, attractive commercial terms, sound production technologies that can meet the challenge. Depending on location, the dominant driver of success may vary from place to place.

India has taken a strong initiative in deepwater and the results so far have been quite satisfying. Rapidly advancing technology, enhanced knowledge coupled with innovative and out of box concepts would continuously push the limit of water depth and number of discoveries in Indian waters.



Dr. Ravi Bastia is currently holding the position of Vice president – Exploration in the Petroleum Business (E&P) Division of Reliance Industries Ltd., the country's largest private sector company. Reliance has several exploration acreages both in India and abroad, spread over complex geological domain, both onland and offshore. Dr. Bastia is guiding the exploration programme of Reliance which has made many major discoveries both in Krishna Godavari and Mahandi Basins of India. Krishna-Godavari discovery is the world's largest gas find of the year 2002 and Mahanadi discovery is unique, which came after 60 unsuccessful wells by previous operators.

He holds a Master degree in Petroleum Exploration from Norwegian Technological University, Norway and a Doctoral degree on Structural Geology from NTH and IIT, Kharagpur. To his credit, he bagged several scientific and professional excellence awards in the international sphere. He is the recipient of the National Mineral Award for the year 2003. He received the best symposia speaker award in the millennium geology contest in the year 2000 at Brazil. He also received the award from Society of Geoscientists & Allied Technologists, during December 2002 for his outstanding contribution to science & technology. Besides his industry excellence, he is actively associated with the academics and research circle. He has also been nominated as the Chairman of the International Conference: Deepwater Drilling Asia 2005, Kuala Lumpur, Malaysia. He has more than fifty publications in several scientific journals / symposia and is a visiting faculty to many Indian Universities.



Technological Innovation in the Energy Sector

Giovanni Paccaloni, SPE President 2005

Abstract:

Innovation is one of the most important SPE values, together with Integrity, Professionalism, Excellence, Diversity, Lifelong Learning, Volunteerism, and Social Responsibility.

Innovation requires three basic ingredients: new ideas, their applicability in real situations, and commercial success (ie remarkable added value out of the application).

Innovation must be nurtured and kept constantly alive inside organizations; creative people hired, kept motivated and retained in a culture and environment permeated of trust, encouragement and recognition. The key for innovation is people, in the various roles of innovators (the source of new ideas), gate keepers (the ones selecting only the new ideas aligned with companies' business strategies) and change agents (the key for replication of successful innovations).

Several examples of technological innovations that have had significant impact over the past decade on the overall E&P results (ie reduction of capex and opex, increased productivity, reserves growth, improved recovery efficiency, extension of companies operating capabilities) will be shown; subsequently an energy outlook (demand and supply) over the next three decades will be presented, together with the challenges associated to the need of matching simultaneously and effectively economic growth and energy sustainability.

The role of technology for the years to come will be discussed, including enhanced accessibility to a number of unconventional resources (tight gas sands, coal bed methane, heavy oils, tar sands, gas&oil, shales, gas hydrates, etc.); increase of energy

efficiency; reduction of carbon intensity; enhanced oil recovery.

Energy security, ie the continuous availability of energy in varied forms, in sufficient quantities and at reasonable prices is of crucial importance for every country. One way to improve energy security is by reducing its energy intensitythe amount of energy required to produce one unit of GDP. Reduction of energy intensity also means a decrease of the slope of worldwide energy demand.

The growing importance of technological innovation on processes such as GTL (Gas to Liquids), Hydrogen production and use in combination with Fuel Cells, and CO2 capture and sequestration will also be strongly emphasized.



Giovanni Paccaloni currently serves as Senior Advisor at Eni Agip's headquarters in Milan. Since joining Eni Agip in 1971, Paccaloni has worked worldwide in various leadership roles, including Vice President, Corporate E&P Laboratories (1997-99); Vice President, Drilling and Production Optimization (2000-02; and Vice President of R&D and Technology Planning (2003).

An SPE member since 1986, Paccaloni served as SPE Director Europe and Africa Region during 1995-99 and was named an SPE Distinguished Member in 2000. He has served twice as Chairperson of the Italian Section and has played an active role in that section's governance for more than 15 years. His many SPE activities include service as Chairperson of the Forum Series Implementation Committee (1993-95), the Forum Series Coordinating Committee (1995-97) and the 1992 Forum Series in Europe Steering Committee. He served as an SPE Distinguished Lecturer during 1988-89 on the topic "Optimization of Matrix Stimulation Treatments."

Paccaloni is Honorary Professor at the Daqing Petroleum Institute (China) and the University of Guayaquil (Ecuador), and Visiting Professor at the Xian Shiyu University (China). During his career, he has authored and co-authored several technical papers, including articles published in JPT and SPEPE. Paccaloni holds an MS degree in industrial chemistry from the U. of Bologna.

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Few ideas from you

Here's your copy of 'SPENDSECNEWS' published to exchange ideas to enhance section operations as well as keeping members informed on section activities and events. We are relying on YOU to provide ideas and information to share with your section colleagues. Please communicate with us.

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