SOCIETY OF PETROLEUM ENGINEERS, NEW DELHI SECTION







From the Editorial Desk

Dear Friends.

It gives us great pleasure to bring you the April issue of SPENDSEC news. The first Anniversary meeting held on March 20th at Le Meridien, New Delhi was a great success with excellent turnout. The section members appreciated very much the Key speaker Steve Cheung's lecture on "The Latest in Ways to Improve Asset Value through Better Water Management" and Robert Brewin's lecture on "An Introduction to CBM:Drilling Technologies and the Indian Experience". You will be pleased to know that our section has already over-achieved our target of membership set for 2006 and is leading in its group at No. 1 position. This month, SPE Middle East has approved the establishment of Student Chapter at IIT Delhi, which was supported by New Delhi Section.

Mr. William M. Cobb, President of William M. Cobb & Assocs. Inc., is the nominee for 2008 SPE President. He heads the slate of SPE members recommended by the Society's Nominating Committee and Board of Directors for SPE board positions. If elected, Cobb would take office as SPE President-Elect in September of this year and become SPE President in November 2007. Mr. Ali H. Al-Hasan has been nominated the Middle East Director. Al-Hasan is the current Chairperson of the SPE Middle East Council.

In April, Mr. A B Chakraborty, General Manager ONGC, who is currently looking after all activities relating to development of CDM Projects in ONGC will be delivering a lecture on "An Introduction to Clean Development Mechanism and Opportunities" to our section members. Clean Development Mechanism (CDM) is one of the 3 flexibility mechanisms under the Kyoto Protocol governed by the UNFCCC of which India is a signatory. This shall provide an opportunity to our members to learn about the CDM process and methodology.

We are pleased to inform that in order to involve Spouse / Children; we have planned Social Get-Together of SPENDSEC members on May 13, 2006. The details shall be available shortly on our website.

We look forward to your feedback and suggestions on the current issue.

Editorial team

Anniversary twin talks: revealing insights into new and old E&P businesses.

March Anniversary Meeting Report

Sunil Kumar Singh, Member SPENDSEC

e would have seldom recognized the days we have put behind, but for the First Anniversary celebration which witnessed widening participation of industry, speakers and more importantly the members. Let us salute Mr Mitra, the Section Chair, Mr Galbreath, Program Chair and Mr. Rahul Bali, Secretary and the entire SPENDSEC team for energizing the wonderful forum - in a place, which is the destination of all, dreaming to contribute towards burgeoning



SPENDSEC Anniversary Cake

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SPENDSEC Activities

Dear Sunil.

"....the New Delhi tour remains the fondest among my DL tour memories. The Newsletter is very nicely put together; in fact, I do not know of any other SPE Section having as good a product as this one. Congratulations! It makes me proud to be an Indian, among many other reasons.....'

Best regards,

Sara Thomas SPE Distinguished Lecturer Perl Canada Ltd.

Dear Rahul

"....let me take this opportunity to congratulate Mr N.K. Mitra, your Section Chairman, Mr Ian Galbreath, your Program Chairman, Mr Ramendra Sinha, your Treasurer and yourself Rahul, as Section Secretary, for what has been an incredible achievement in terms of establishing a new section and bringing it up to speed so quickly and

Your program of meetings is excellent, your newsletter is magnificent and your website is inspiring. I really can not imagine that you could have achieved any more in your first year. Please convey my sincere congratulations to all your section officers and members

Very best wishes

Ross Davidson **Director of Operations** SPE Middle East Office, Dubai

April Technical Section Meeting

An Introduction to Clean Development Mechanism and **Opportunities**

Speaker A B Chakraborty, General Manager, Oil and Natural Gas Corporation



Magnolia, India Habitat Centre, Lodhi Road, New Delhi

Tuesday, April 25, 2006 at 1900 Hrs

To check details visit events section at our website at http://newdelhi.spe.org



Forthcoming Regional and International Events

Dates	Meeting	Location
1-4 May 2006	Offshore Technology Conference	Houston, Texas, USA
7 - 12 May 2006	Hydraulic Fracturing Beyond 2010 - Forum	Macau, China
14 - 20 May 2006	The Future of Smart Fields - Forum	Macau, China
11 - 14 Jun 2006	Managed Pressure Drilling - ATW	Phuket, Thailand
18 - 21 Jun 2006	Artificial Lift - ATW	Mumbai, India
11 - 13 Sep 2006	Asia Pacific Oil and Gas Conference and Exhibit	tion Adelaide, Australia
24 - 27 Sep 2006	Annual Technical Conference and Exhibition	n San Antonio, USA
16 - 18 Oct 2006	SPE/IADC Indian Drilling Technology Conference and Exhibition	Mumbai, India
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5 - 8 Nov 2006	Abu Dhabi International Petroleum Exhibition a Conference	and Abu Dhabi, UAE

energy needs of resurgent India. Besides, what we know of what we have achieved through knowledge sharing, technical deliberations and presentation, we have had the privilege to come across persona of extraordinary people and pioneers – synthesizing proud cultures, perceptions and capabilities. This anniversary twin talks were the latest in the series.

Robert Brewin presented the current CBM perspective in the Indian subcontinent. The topic in itself aroused considerable interest among the audience as the relentless pursuit for cleaner energy world over has found Coal Bed Methane (CBM) gas a truly workable option to pursue. It was, therefore, a delight to get a first hand account of the current technology and silent paradigm transition in CBM exploitation strategy by Bob – of course, under the caveat of an "introduction". What made the presentation truly interesting was the fact that the treatment of the subject was wired to the actual "goings on" in the acreages undertaken for development in West Bengal, India and the international "happenings" on the subject around the world.

The mechanism, being advocated for exploiting CBM gas now-a-days, has changed subtly, but surely. The new approach to treat coal bed at par with oil field development in relation with drilling



Steve K. Cheung delivering the talk.



Mr. S.K. Patra, Director, Oil India Ltd. releasing the anniversary issue of SPENDSEC News.

technology is something that CBM industry would have ever dreamed; thanks to the price that market is willing to pay for the gas.

This parity, it appears, allows a whole set of exciting drilling technologies that may control well path to meander sub-surface and let the methane molecules overcome the Vander Waals forces to come into the well bore. Induced fractures, which the industry had earlier thought to fit in the development schemes for the purpose we are about to be convinced – may give way to the guaranteed reach made possible by the new breeds of smart well bores with extended sub-surface exposures. May be, a "mini-frac" would be around to supplement cleat connections, reducing the vitally important pressure barrier in some cases. Bob summarized his thoughts quoting Encana "Horizontal technology is the way forward" and the quote, undoubtedly, indicated the option, currently favoured by the industry.

The understanding of the process, desorption isotherm, pressure, cleat system & permeability and whole lot of other critical aspects related to CBM gas production have been worked upon in relation with Indian coal deposits. Sophisticated simulation, using state of the art simulation techniques and softwares, have been tried to benchmark potential, but what industry was looking forward was the physical evidence of sustained production rate. Thanks to ONGC, which drilled the first CBM well at Parbatpur near Bokaro Steel City that this crucial physical evidence is now there - a stabilized production @ 7000 m3/day over a period of 7-8 years. Project economics can now safely work backward from here on.

The implication of these developments is simply overwhelming that would necessitate a change the way we look at coal bed projects. The CBM projects are definitely getting more drilling - centering with the emphasis on the greater subsurface exposure, drilling speed and rapid rig deployment. The drilling requirement saves on the undesirables and heavy appendages of oil well drilling, but at the same time calls for modern gadgetries, required for controlled drilling and flexible completions.

Talking to Bob, it looked as if CBM gas production may be finally be a reality in this part of world in coming years. Steve Cheung, on the other hand, charmed the audience with his characteristic enthusiasm, unleashing a series of insights into the perennial problem of fluid management for efficient oil and gas production. His talk had the backing of vast experience and elements of scientific investigation, which have practically differentiated a "success" with "failure" in this industry. He demonstrated an uncanny sense of identifying and analyzing key elements for managing reservoir energy and producing fields at optimum cost.

We would have not believed, but for Steve, that we may end up monitoring chemicals, which is yet stored in the warehouse! It is not surprising then that the industry is in the business of recycling water and chemicals; believing at the same time that incremental production is bearing the cost on a long term basis. The industry's inability to base its acts on scientific investigation has been revealing. In particular, he warned that tendency to evaluate enhanced production measures statistically should be dispensed with and scientific investigation with quality laboratory back up be adopted to improve project success in managing reservoir energy and in improving hydrocarbon production.

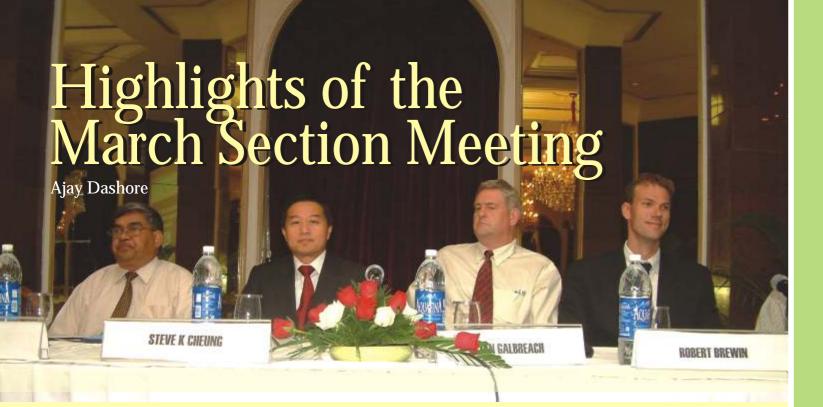
On a query in the question-answer session, it emerged that chemical water shut off is not a one time measure, but rather has a periodic time line which may judiciously be managed on short term basis, keeping cost benefit analysis of water shut off job in mind.

Glimpses of First Anniversary Meeting, March 20, 2006



SPENDSEC





he March Technical cum Ist Anniversary Section meeting of SPE New Delhi Section was held on 20th March 2006 at Windsor Hall, Le Meridien, Delhi. The anniversary meeting began with the welcome note and address by Section Secretary, Rahul Bali along with a presentation on the achievements of the SPENDSEC. SPE New Delhi section has achieved a target of 105% in membership drive in the first year itself. Program Chair Ian Galbreath introduced the distinguished speaker Steve Cheung and Robert Brewin to the gathering. To mark the 1st Anniversary of the section, a special cake in the form of SPE logo was prepared and distinguished lecturers jointly did the honour of cutting the cake. On this occasion the special anniversary issue of SPENDSEC News was also released by Mr. S.K. Patra Director Oil India Limited.

Robert Brewin, Country Manager, India for Mitchell



Mr. Ian Galbreath, Programme Chair, presenting a memento to Mr. Steve Cheung, SPE Distinguished Lecturer (Right)

Drilling international, delivered a lecture on "An Introduction to CBM:Drilling Technologies and the Indian Experience". Coal makes up approximately 50% of the energy generated by fossil fuels, globally. However much of this coal has been exploited without the realization of the clean fossil fuel gas that exists within the coal. This alternative energy source is coal bed methane, or CBM. The lecture was an interesting mix of latest technologies being used in CBM with special reference to the Indian fields which are under development. The various drilling techniques such as Dymaxion that has been used in CBM field developments were discussed. In Australia, the worlds leading coal exporter, innovative operators have capitalized on mine methane gas by degasifying the coal as a saleable product before the coal is mined.

Steve Cheung Project leader Conformance control at Chevron Texaco Energy Technology company delivered the lecture on "The Latest in Ways to Improve Asset Value through Better Water Management". The talk highlighted some of the latest technology in prevention, diagnosis, chemical methods for better water management with supporting field case history. The need of the hour is to delay water production in new fields and to maximize efficiency in mature producing fields. The audience appreciated the twin series of lecture very much and took keen interest. This was visible in the highly interactive question answer session which followed the lecture. Section Chair presented the guest speaker with a memento after the lecture. On this occasion, SPENDSEC thanked the Mitchell Drilling International for sponsoring the meeting and newsletter. The meeting ended with the vote of thanks to the distinguished speaker and invitees.

An Introduction to Clean **Development Mechanism and Opportunities**

A B Chakraborty Oil and Natural Gas Corporation Ltd (ONGC)

Clean Development Mechanism (CDM) is one of the 3 flexibility mechanisms under the Kyoto Protocol governed by the UNFCCC. To facilitate fulfilment of commitment of developed nations towards reduction of emissions, the Non Annex -1 countries have an opportunity under the CDM to undertake such projects which curb release of GHG's, earn Carbon Credits & trade the same internationally. India is signatory to the Kyoto Protocol & currently the leading country in the development of CDM Projects amongst developing nations.

CDM is a climate change business opportunity. The entire process of the CDM project development, methodology, procedures, role of different agencies, project registration, CER trading, CDM revenues & costs have been covered in the presentation. The CDM process & methodology is rather complex & involves global scrutiny. The entire CDM cycle has many stages that is critical for the successful completion of the project.

In this Presentation the author will introduce CDM process, sharing experience of the CDM projects which have been developed in ONGC and also the future projects. The speech will also include the benefits & advantages from CDM Projects and the need for greater cooperation amongst different oil & Gas companies in sharing experience.



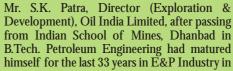
A B Chakraborty, General Manager ONGC, is currently looking after all activities relating to development of CDM Projects in ONGC. He joined ONGC in June 1975. He has worked in different areas including quality control, operations, drilling, HSE & currently in Alternate Energy & Carbon Credits. He has

considerable experience in HSE both at the regional & corporate level and has developed procedures, guidelines, regulations besides addressing HSE organizational design related issues. He has presented 4 papers in the SPE HSE international conferences besides other in the national/international conferences. His core specializations are in area of Environment, Safety, Occupational health & Energy, He Holds degrees, M Tech (Production Engg) from IIT Delhi, MBA Jamnalal Bajaj Mumbai, MSc Environmental Science from Kakatiya University, PG Diplomas in Environmental management, Environmental, & Diploma in Safety management from London.

SPENDSEC Executive Committee Profile

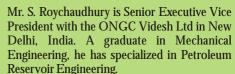
continueed from previous issue..... Profile of executive body members.

S.K. Patra Director, SPENDSEC



India. Joining as Production Engineer in ONGC, a National Oil Company, he changed over to R&D to study Enhanced oil recovery processes. He groomed himself as a Reservoir Engineer and finally served ONGC as Head of Exploration in Bombay Offshore fields, Bombay. After nearly 30 years of stint in ONGC, he joined OIL, another National Oil Company as Director (Exploration & Development) and is continuing since the year 2000. He is accredited for designing of EOR Polymer flooding pilot for Sanand fields. He is responsible for commissioning first Insitu Combustion Pilot Project for Balol Field of ONGC for enhancing heavy oil recovery. Production enhancement of Bombay offshore fields, optimum field development with a mix of horizontal, multilaterals and conventional wells are notable contribution of Shri S.K. Patra. He has served as a Technical Committee Member and chaired Technical Sessions on EOR in Asia Pacific Oil and Gas Conference and Exhibition 2000 at Brisbane. He has published more than twelve technical papers in National and International Seminars.







Mr. S. Roychaudhury has been associated with the development of Heavy Oil Resources in India from 1978 till the end of 2000. During this period he led the multidisciplinary team for the implementation of Insitu combustion process in the heavy oil fields situated in the western part of India.

Before joining ONGC Videsh Ltd he served as the Sub Surface Manager of an Offshore Asset in Mumbai, India.

Currently as Senior Executive Vice President he looks after the business opportunities in Latin America, Egypt, Qatar, Syria. He has held SPE positions in the past and currently he is one of the Directors of SPE, New Delhi Section.

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Society of Petroleum Engineers

Editorial / Publication Team: Ajay Dashore (dashore_ajay@ongc.co.in) Rahul Bali (rahulbali@spemail.org) Ramendra Sinha (ramendrasinha@spemail.org)

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