



NEW DELHI

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SPENDSEC

Volume 1 • Issue 4 • December 2005

NEWS

From the Editorial Desk



Dear Friends,

The year 2005 was quite an eventful year for the SPE New Delhi section. Almost a year ago, on December 13, 2004, our kickoff meeting to establish this section was held wherein a provisional Section Officers' Committee (Founder Section officers), under the chairmanship of Mr. N.K Mitra took up the responsibility of initial setting up process. On March 13, 2005 New Delhi Section of Society of Petroleum Engineers became an official section and received our Section Charter.

The year culminated with the visit of Mr. Giovanni Paccaloni, 2005 SPE President to our section on December 1, 2005 and the initiation of student chapter establishment at Indian Institute of Technology (IIT Delhi).

SPE Distinguished Lecturer Sara Thomas shall be delivering a lecture on topic "Chemical EOR: The Past-Does It Have a Future?" on January 16, 2006 at India Habitat Centre. She will be the first DL to visit SPENDSEC.

Our efforts so far have been appreciated by the industry players and they have come out to support our cause.

In 2006, it will be our endeavor to hold regular section meetings for cross flow and exchange of ideas. We are planning to initiate a membership drive with a focus on Quality and attracting more young members while retaining our senior colleagues. Current strength of the section is 93.

Wishing you a very Happy and Prosperous New Year 2006.

Highlights of the December Section Meeting and Institute Visit

Ajay Dashore and Rahul Bali

The Special December Technical cum Monthly Section meeting of SPE New Delhi Section was held on Dec. 1, 2005 at Le Meridian Hotel, Delhi. The Executive Committee meeting was held in the morning session that was chaired by Giovanni Paccaloni SPE 2005 President.



Special Executive Committee Meeting during SPE 2005 President Visit.

Special invitees Rakesh Jaggi, Country Head Schlumberger and Arun P Karle from IADC, South Central Asia Chapter were also present. At the onset N.K. Mitra, Section Chairperson welcomed the SPE 2005

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Few Responses to SPENDSEC Activities



Dear Rahul,

It was my great pleasure to visit your dynamic SPE section! The commitment of your Chairperson, the dedication of the whole Board, the enthusiasm of the local students and young professionals have impressed me deeply.

I have spent in India some of the richest time ever, thanks the kindness, effectiveness and motivation of so many volunteers.

I would also like to thank you for the organization of the tour to the Taj Mahal, -- unforgettable experience--, for the pictures, and for all the attention paid around Ross and myself as SPEI representatives.

The SPE Section in New Delhi, the other India Sections and Universities have a great future ensured, in light of the generous commitment of time and energy of our members.

Please pass on to the full Board my sense of appreciation for the terrific work done so far, and my wishes for an even better future!

All the best, and all the good wishes for the Season Holidays and for a prosperous and successful New Year.

Giovanni Paccaloni
2005 SPE President

Dear Rahul,

I want to congratulate you and SPE Delhi Chapter Team for the wonderful programme you had organized in Delhi on 1st December. IADC & SPE should work more closely and interact on the future programmes.

Arun P. Karle
Former Vice Chairman, IADC South Central Asia

Dear Rahul,

The year 2005 has been a year of phenomenal success and forward movement for SPENDSEC. After its institution we had regular technical meetings/workshops, Student chapter is initiated and important world class technocrats visited us that includes out going SPE President. In addition section published e-version of a regular Newsletter. All these outline the SPENDSEC success and growing interest of SPE members during 2005. Let me congratulate the SPENDSEC team members for this tremendous achievement. As you have played a key role in all these developments, I wish to specially congratulate your effort. I am proud to be an SPENDSEC member today.

Regards,
Vimal Saxena
SPENDSEC Member

Technical Meetings Announcement

Chemical EOR: The Past – Does It Have a Future?

Speaker- Sara Thomas
Monday, January 16, 2006
at 1900 Hrs

Venue:



Maple, Convention Centre, India Habitat Centre,
Lodhi Road, New Delhi

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

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Calendar of Events

January Section Technical Meeting
Date: January 16, 2006
Place: Maple, India Habitat Centre, Lodhi Road
Time: 1900 Hrs
Topic: Chemical EOR: The Past Does It Have a Future?
Speaker: Sara Thomas, SPE Distinguished Lecturer

February Section Technical Meeting
Date: February 22, 2006
Place: Magnolia, India Habitat Centre, Lodhi Road
Time: 1900 Hrs
Topic: Global Warming: Where Do We Stand?
Speaker: T. S. Ramakrishnan, SPE Distinguished Lecturer

March Section Technical Meeting
Date: March 22, 2006
Place: India Habitat Centre, Lodhi Road
Time: 1900 Hrs
Topic: The Latest in Ways to Improve Asset Value Through Better Water Management
Speaker: Steve K. Cheung, SPE Distinguished Lecturer

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President introduced Section Officers to the SPE 2005 President. He then gave a brief insight into the current years section activities.

Rahul Bali, Section Secretary made a presentation on SPE Delhi section activities and goals.



Giovanni Paccaloni, SPE President 2005 addressing SPENDSEC members.

Program Chair Ian Galbreath apprised the board of the forthcoming technical meetings of New Delhi section. Dr Gopalakrishnan, Director spoke about the new initiatives which have been taken for opening a student chapter at IIT Delhi. Rakesh Jaggi also reaffirmed the commitment for developing and promoting the SPE student chapter at IIT Delhi. Treasurer and Chairman Membership provided update on their respective areas.

Giovanni Paccaloni appreciated the various activities of New Delhi section. He said that SPE should encourage those members who can actively contribute to the Section. More stress has to be on quality of members and not the quantity. He lauded the efforts of SPENDSEC team that launched section web site and published regular monthly



David Hawkes making a presentation on "Advances in a Sand Management System".

section magazine within six month of section establishment. Further he added that more recognition and awards should be instituted for the members /professionals with outstanding contributions to the society and industry. Looking at the increasing average age of Industry Professionals, he opined that more young professionals should be encouraged to join SPE. They should be educated about the good things of our industry. SPE Delhi section should develop programmes for the young as YEPP and ELP. He also stressed upon the need to conduct family gatherings for the members.

In the post lunch session four lectures were delivered by the invited speakers. The meeting was well attended by nearly 60 members and guests. Dr Ravi Bastia VP Reliance Industries Ltd delivered a lecture on "Deep Water Frontiers The future of India". He cited the challenges faced in the deep water exploration and also gave case studies of KG

Basin field which is world's largest gas find of year 2002.

Very informative presentation on "Cost Effective Production Solutions" by Dr Said Mufarji, M/s MBPS, Oman and another on "Advances in a Sand Management System" by Mr David Hawkes, Manager Well Testing &



Interactive Question, Answer session.

System" by Mr David Hawkes, Manager Well Testing & Production Services, also from M/s MBPS were given.

Mr Giovanni Paccaloni delivered his key lecture on Technological Innovation in Energy Sector. Several examples of technological innovations that had significant effect over the past decade on the overall E&P results were shown. The energy needs for the next three decades was also presented along with challenges associated for economic growth and energy sustainability.

The audience took keen interest in the presentation. During the meeting SPENDSEC News was released by Giovanni. A joint Question Answer session was held after all the presentations. The section thanked all the speakers and gave a standing ovation to Giovanni Paccaloni.

During the pre-lunch session a media interaction was organized for the forthcoming SPE-IADC joined Indian Drilling Technology Conference and Exhibition scheduled for October 2006 at Mumbai.



Media Interaction SPE-IADC Committee.

Glimpses of December 1, 2005 Section Meeting

SPENDSEC



Chemical EOR: The Past Does It Have a Future?

Rahul Bali
January SPE Distinguished Lecturer Section Meeting Preview

Abstract:
Chemical EOR methods indeed have a future, a very bright one too. Consider, nearly two trillion barrels of conventional oil worldwide that will be left unrecovered when primary and secondary recoveries have been exhausted. The greater portion of this oil will have to be recovered by clever chemical EOR methods, because other methods are frequently inapplicable, due to unavailability of suitable fluids, among other reasons.

Chemical EOR methods include utilization of polymers, surfactants, alkaline chemicals and their combinations, as in ASP (Alkaline-Surfactant-Polymer), or use of microemulsions as in micellar flooding. Hundreds of field tests have been carried out, with little "technical success", (viz. production of incremental oil), let alone commercial success. Micellar flooding has been more successful in this regard, at least as far as recovery of tertiary oil is concerned. ASP has been reported to be successful in a few field tests. The economics of both processes were unfavourable until recently, but need to be reevaluated under the current oil prices.

The reasons for the lack of success include inadequate understanding of the process itself, unscaled laboratory

experiments, and low oil prices, exacerbated by less than adequate definition of reservoir geology. Much can be learned from past failures: first about the limitations of a given process, and second, about how a process can be modified for a given reservoir if at all it is feasible. The looming energy crisis necessitates the application of suitable chemical EOR methods for additional oil recovery. Coupled with today's trend in oil prices, chemical methods stand to hold a bright future sooner than later.



We need to develop reservoir specific EOR technologies, with focus on commercial viability. Examples are offered for selected reservoir conditions. As the oil price increases, so does the cost of chemicals, but in a different proportion. Other important aspects of chemical EOR, viz. types of research and pilot testing needed, development of new methods and scaling criteria for reliable laboratory experiments are also discussed.

Sara Thomas manages research for PERL Canada, Ltd. She holds B.Sc. and B.Ed. degrees from the University of Kerala, India and a Ph.D. in Chemical Engineering from the University of Birmingham, U.K. She worked as a research associate and conducted research on Chemical EOR methods for 25 years. She has taught courses in petroleum engineering at the university of Alberta for 5 years. She has authored and co-authored 43 papers and 12 research reports on various EOR processes. Currently, she offers courses on EOR methods, miscible and immiscible flooding, gas injection and scale up methods for EOR processes.

Share our strength and Build the World of SPE

Invite your colleagues to join and enjoy the benefits SPE offers.
Very soon New Delhi section is starting a membership drive.

Just watch out our website for details:

<http://newdelhi.spe.org>

Global Warming: Where Do We Stand?

Rahul Bali
February SPE Distinguished Lecturer Section Meeting Preview

Abstract:
Out of the roughly 30 Gt of anthropogenic carbon dioxide emissions into the atmosphere, about 25 Gt are due to the consumption and flaring of fossil fuels. Several studies have demonstrated a direct link between the accumulation of green house gases in the atmosphere, and a surface global warming of about $0.6 \pm 0.2^\circ\text{C}$. Given the expected growth in the energy demand, and the resulting gradual shift to coal to bridge the supply gap, a more pronounced carbon dioxide emission is likely in the next few decades. To mitigate some of the undesirable consequences in climate change as forecasted by the IPCC, carbon sequestration seems to be the most viable option for the medium term. With the vast experience dealing with hydrocarbon reservoirs and fluid injection, we argue that the oil and gas industry appears to be the best suited to provide the most viable solutions for reducing atmospheric accumulations of greenhouse gases. As estimated by the EPA and others, more than 100 years of carbon emissions may be stored in saline aquifers alone. In this lecture, we illustrate some of the cost issues



and cover the technology gaps that need to be overcome to economically store carbon emissions in underground reservoirs. We will also describe a few of the field studies currently underway and show their progress. Before we conclude the talk, we discuss GCEP at Stanford and other consortia that we are members of.

T. S. Ramakrishnan is a scientific advisor in Schlumberger-Doll Research, and is currently responsible for carbon sequestration research within Schlumberger. At present, he is also a member of the management committee in the GCEP initiative at Stanford University. He has more than 18 years experience in the oil service industry. In the past, he has led the flow in porous media, reservoir monitoring & control, and petrophysics programs in Schlumberger research. He is a distinguished member of the SPE and has been a member of the SPE technical committee and the SPEJ editorial board. He has twice won the Schlumberger Henri-Doll award. He also received the P.C. Ray award for his undergraduate work. He has fourteen patents and several pending. He has published in the areas of two-phase flow in porous media, well testing, enhanced oil recovery, carbonate rock physics, invasion, relative permeability logging, formation testers, intelligent completions etc. He has a BTech degree in chemical engineering (IIT Delhi) and a PhD, also in chemical engineering (IIT Chicago)

Forthcoming Regional and International Events

Dates	Meeting	Location
26 - 27 Jan 2006	Naturally Fractured Reservoirs - ATW	Houston, Texas, USA
28 - 31 Jan 2006	Well Integrity Management - ATW	Abu Dhabi, UAE
6 - 9 Feb 2006	Advanced Wells in the Oilfield - ATW	Moscow, Russia
7 - 8 Feb 2006	In-well Optical Sensing - Subsea Well Applications - Are We Ready? - ATW	Galveston, Texas
12 - 15 Feb 2006	Middle East Colloquium on Petroleum Engineering Education	Dubai, UAE
19 - 22 Feb 2006	Project Management: Planning for Excellence - ATW	Shanghai, China
12 - 15 Mar 2006	Well and Reservoir Surveillance/Management in a \$60 Oil Price World - ATW	Bandar Seri Begawan, Brunei Darussalam
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

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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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