Volume 1 • Issue 6 • February-March 2006

**NEWS** 



## Chairman's Corner

Dear Members,

Greetings on the first anniversary of SPE New Delhi Section. My congratulations to each on of you who could participate and contribute to this success. The section is at its infancy but has already made its presence felt in the International arena with 116 members.

The visit of 2005 SPE President Giovani Paccaloni in December 2005, to the youngest Section of India was a moral boosting. The interaction with him was very informative and clearly brought out the expectations from the Section. The tasks ahead are challenging, but I am confident that the collective wisdom shall help the Section chart out a glorious path for itself.

The effort in establishing a Student Chapter in IIT, Delhi in such a short span is a remarkable achievement. In the last Section meeting in February 2006, the participation from young engineers and faculty from IIT, Delhi was a welcome step, which is line with the current SPE policy. I am confident that such interaction shall help in to bring in the young talent in Indian Oil & Gas Industry, which is establishing itself in providing the energy security of our country.

I would also like to compliment the Executive Committee of SPE New Delhi Section in putting together very high quality technical meetings during the very first year. The SPE New Delhi Section newsletter SPENDSEC News has received rave reviews and is now available on the website of ONGC reports. We have become the first and only section in India to have a website for knowledge and information sharing.

I wish you all a very Happy and Enjoyable Anniversary bash.

Niladri K Mitra

# Oil & Gas industry should play a major role to fight global warming: Says Rama

February Meeting Report Debasish Mukherjee

il industry specialists are arguing that Oil and Gas industry is best suited to provide viable solutions for reducing atmospheric accumulations of greenhouse gases. This came up during discussions in one of the distinguished lectures sponsored by the Society of Petroleum Engineers (SPE) at New Delhi on 22nd February 2006.

Dr. T S Ramakrishnan, scientific advisor in Schlumberger Doll Research and currently responsible for carbon sequestration research within



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# In Response to

## **SPENDSEC** Activities

#### Dear Rahul.

After a hectic trip, I am back to my office. The warm welcome and the reception accorded in Bombay, New Delhi and Dehra Dun was overwhelming. I thank you for all the effort you took to organize the visit, and the pleasant atmosphere that was prevalent across all the sites I visited

In New Delhi, in particular, what a pleasant surprise it was to see my BTech thesis advisor attending the talk.

## Best regards,

TS Ramakrishnan Schlumberger Doll Research SPE Distinguished Lecturer

#### Rahul,

Thank you again for copying me on your section's events. What a great meeting you had and my congratulations on the attendance and support from ONGC. I continue to be amazed by the great strides your section has made in its first year of establishment. Well done!

### Kind regards,

**Brian Wiggins** Sections Manager

Congrats Mr. Rahul Bali, for taking keen interest in pursuing professinal excellence through SPE at New Delhi.

Dyanamic leadership and guidance of our respected Director (offshore) in SPE will further help dissemination of the Knowledge.

## Regards,

R K Vij Sub Asset Manager, Geleki, ONGC

## Anniver sary Meeting Announ cement

An Introduction to CBM: Drilling Technologies and the Indian Experience Robert Brewin, Country Manager, India Mitchell Drilling International

The Latest in Ways to Improve Asset Value Through Better Water Management Steve K. Cheung, SPE Distinguished Lecturer Chevron Texaco Energy Technology Company

#### Venue:



Windsor Hall, Le Meridien, Janpath, New Delhi

Thursday, March 20, 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
2 - 4 Apr 2006	Eighth International Conference on Health,	
	Safety and Environment	Abu Dhabi, UAE
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 Exhibition	Adelaide, Australia
24 - 27 Sep 2006	Annual Technical Conference and Exhibition	San Antonio, Texas USA
16 - 18 Oct 2006	SPE/IADC Indian Drilling Technology	
	Conference and Exhibition	Mumbai, India
5 - 8 Nov 2006	Abu Dhabi International Petroleum Exhibition and	
	Conference	Abu Dhabi, UAE

Schlumberger, illustrated some of the cost issues and technology gaps in Carbon Sequestration - billed as the most viable option to mitigate the undesirable consequences of carbondioxide emissions into atmosphere.

Of around 30 Giga-tonnes of anthropogenic (caused by human beings) carbon-dioxide emissions

into the atmosphere, around 25 Giga-tonnes are due to consumption and flaring of fossil fuels. Studies have demonstrated a direct link between the accumulation of green house gases in the atmosphere, and a surface global warming of around 0.6 degree centigrade.

Dr. T S Ramakrishnan argued that if some industry can solve the problem of carbon sequestration, it is

the Oil and Gas industry, as, with a vast experience related to reservoirs and fluid injection, it possesses the required expertise.

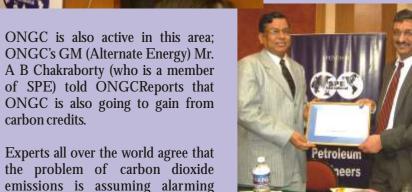
The only area which the Oil and Gas industry need to catch up is process engineering - relating to the separation of carbon. Experts have estimated that more than 100 years of carbon emissions may be stored in saline aquifers alone. Coal Bed Methane is also an interesting area in the studies as carbon dioxide can be captured in coal beds.

A number of projects are underway in USA, Europe, Africa and Australia to bridge the technology gaps. At corporate level, many Oil & Gas organizations like Statoil have gone ahead on this and profited from carbon tax, applicable in Norway.

never breached a historic ceiling of 280 ppm (parts per million) in the past million years, has currently reached 380 ppm in the last century. Methane (which, being a much more efficient absorber of infrared radiation, is a worse greenhouse gas) also has increased to 1750 ppb (parts per billion), much above the baseline of 750 ppb which was maintained for

millions of years till the nineteenth century.

Issues like carbon sequestration are now featuring actively in a bigger subject - Climate Science which, for obvious reasons, is one of the fastest growing sciences currently in the world.



Mr. Mitra handing over a certificate of appreciation to the SPE distinguished lecturer Dr. T S Ramakrishnan.

## Technical Meetings during the year

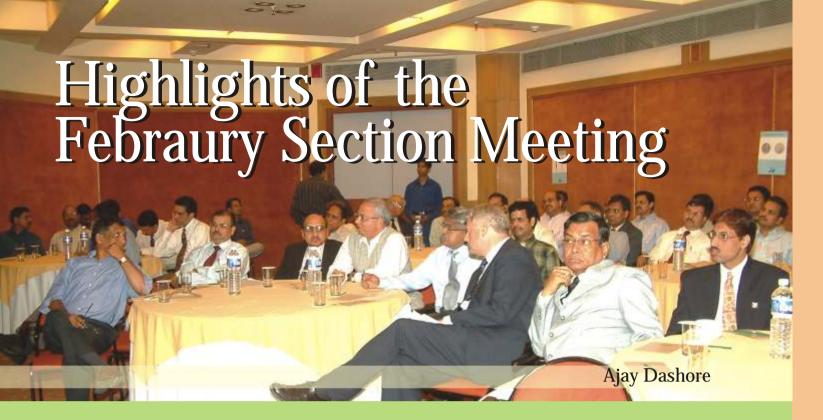
proportions. The atmospheric

concentration of carbon dioxide,

which, strong evidence suggests,

It has been our endevour to bring distinguished speakers to our section technical meetings on variety of topics. We are thankful to all the speakers for sharing knowledge through delivering informative talks to our section members. Topics covered, during the year so far, are as under:

- 1. Borehole Acoustics for Petrophysical Evaluation Vimal Saxena, Geophysist ONGC
- 2. After 57 Years of Perforating, Does it Still Have a Future? Larry Behrmann, Schlumberger
- 3. Deepwater Frontiers- The Future of India Dr Ravi Bastia, Reliance Industries Ltd
- 4. Cost Effective Production Solutions Dr Said Mufarji, M/s MBPS, Oman
- 5. Advances in a Sand Management System David Hawkes, M/s MBPS, Oman
- 6. The Role of Technological Innovation in the Energy Sector Giovanni Paccaloni SPE 2005 President
- 7. Chemical EOR: The PastDoes It Have a Future? Sara Thomas, SPE Distinguished Lecturer
- 8. Global Warming: Where Do We Stand? T.S. Ramakrishnan, SPE Distinguished Lecturer



he February Technical cum Monthly Section meeting of SPE New Delhi Section was held on 22nd Feb 2006 at India Habitat Centre, Delhi. Section secretary presented a brief update on section activities. Section Chairperson welcomed the SPE Distinguished Lecturer Dr T.S. Ramakrishnan and the SPE Delhi section members. Program Chair introduced the Distinguished speaker to the gathering.

Dr T.S. Ramakrishnan, Scientific advisor Schlumberger Doll Research then delivered a lecture on topic "Global Warming: Where do we stand?". He discussed the results of different case studies on Global warming and



consumption of fossil fuels. The expected growth in the energy demand will result in more shift to fossil fuels and pronounced Carbon Di Oxide emission in the next few decades. The lecture presented analysis of various options available for mitigating the undesirable consequences of Global Warming.

With the vast experience of dealing with Hydorocarbon reservoirs and fluid injection, Carbon sequestration has emerged as the most viable option in the medium term for the Oil and Natural gas industry. Further he proceeded to elaborate the cost issues and the technology gaps that are required to overcome to economically store carbon emissions in the underground reservoirs.

The audience appreciated the 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.

At this occasion the latest issue of SPENDSEC News was also released. This meeting was also attended by the Student Chapter President Sanjay Patel and Professors Pant and Rao from IIT Delhi.

The meeting ended with the vote of thanks to the distinguished speaker and invitees.

# An Introduction to CBM: Drilling Technologies and the **Indian Experience**

Robert Brewin, Country Manager, India Mitchell Drilling International

### Abstract:

With the unprecedented global demand for energy, driven by India and China's break neck pace economies, there is a significant need to unlock alternative energy sources. 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 US, Canada and Australia are leading the way in terms of CBM drilling and production. In the US alone production from CBM wells exceeds the equivalent energy production in India of all gas and oil production combined. In Canada it was recently announced by the Alberta Energy and Utility Control board that there was a need to drill a further 800,000 CBM wells. 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

In this presentation the author will introduce CBM and the production mechanism within the coal as well as highlighting drilling techniques, such as dymaxion, that have been used successfully on CBM field developments. The speech will also include the status of CBM in India, the contracting environment and need for greater cooperation between conventional Oil and Gas bodies such as the SPE/IADC and the DGH within India.



Robert Brewin, Country Manager, India for Mitchell Drilling international, coordinates all drilling activities for MDI, in India and within the region. He joined MDI in 2005 after having spent several years as a senior drilling engineer working on Advanced Drilling Techniques (ADT) for Companies such as Total Final Elf. Shell. and Santos. Previous

to this he worked with numerous service companies and drilling contractors gaining a well rounded knowledge of well construction techniques. Robert has an Applied degree in Petroleum Engineering from the Southern Alberta Institute of Technology, as is currently enrolled in the distance learning Msc Drilling Management course offered by Robert Gordon University in Aberdeen. He has been in Oil and Gas Industry for over 17 years and has been a member of the SPE since

# The Latest in Ways to **Improve Asset Value** Through Better Water Management

Steve K. Cheung, SPE Distinguished Lecturer ChevronTexaco Energy Technology Company

## Abstract:

Many wells and reservoirs are prematurely abandoned due to excess water production, resulting in lost production and recovery. We need ways to delay water production in new fields, and to maximize efficiency in mature producing fields. This talk highlights some of the latest technology in prevention, diagnosis, mechanical/chemical methods, and with supporting field case history. Specific applications for injector, producer, reservoir-wide, and facility-related will be communicated. New near-wellbore and reservoir indepth treatments will be particularly detailed. There will be discussions on Best Practices/ Lessons Learnt to improve the success rates, and mention of challenges ahead.



Steve Cheung is the Project Leader Conformance Control at ChevronTexaco Energy Technology Company. He holds M.S. Petroleum Engineering from University of Southern California, and a Ph. D. in Chemistry from University of California, Irvine. He has worked in

the industry for over 25 years, and was Team Leader Produced Water Management, and Team Leader Oilfield Chemistry. He teaches in-house Water Control Workshop worldwide and has consistently received the highest marks. Steve also organized in-house worldwide Subsurface Conformance Control conferences, and taught graduate-level Petroleum Engineer class at USC. He has authored papers in Well Stimulation, Conformance Control, EOR, Reservoir Monitoring, and Flow Assurance. He has been invited to speak in many meetings in USA, England, France, Denmark, Brazil, Oman, and Malaysia. He was a SPE Technical Editor, chaired many sessions in SPE Annual Conference, and co-chaired a 2004 SPE-ATW.

# Glimpses of February 22, 2006 Section Meeting





## **SPENDSEC Family**

# Piyush storms out of bunkers into reckoning

Courtesy: ONGC Reports

nita got furious. The two thousand rupees she had kept aside for **L** buying the blue cello dinner set has been used to buy a putter for Piyush. Does her four-and-a-half year old son need a putter to push a golf ball down a hole six inches away?

But her husband Vijay would not listen. His club - three inch taller than Piyush -was unmanageable for his son. He wanted to capture that cheer and delight in his son's face for ever. The cheer - whenever the golf ball drops down the hole; the delight whenever the ball races up in the sky. Piyush's love for golf took shape when as a four-year old, he used to accompany his father to the Golf Range in Gurgaon. Seeing the ball getting dug out of the bunkers with a sand storm, he found the sport simply irresistible.



Vijay, known as VP in friend circles, was quick to spot his son's passion for the game. Tips poured in from the enthusiastic father, enabling Piyush to grasp the fundamentals in no time. Golfing was a pastime for his ONGCian father; for Piyush, it was everything.

After the putter, a half kit arrived. His mother also started sharing her son's intense passion to excel in the game. "He quickly picked up how to swing, to transfer weight and follow up the tee-shots", recalls the proud father. Though bunker shots - his first love - remained his favourite.



Piyush excelled in other shots as well in quick time.

During summer vacation of 2003, Piyush joined DLF Golf Academy for summer camp there. Soon after, he was a regular in DLF Golf course, 3 km from his residence in Gurgaon. Professional coaching sharpened his natural traits.

At five-and-a-half, while he was practising one day, he was spotted by Wing Commander Aprajit, the Secretary General of Indian Golf Union (IGU). At six, he played his first tournament at Jay Pee Greens at Greater Noida, as the youngest player in the Sub-junior Golf Circuit. Indications of his capability were evident to all. Soon, he was playing all around the Country.

There was no looking back for Piyush. He kept on improving his position, from 10th in the first tournament to 5th at the last tournament he played – All India Junior in Pune. As per the Indian Golf Union (IGU) merit list of 2004-05, he is placed at 7th position in 'D' category below 10 years.

Ace golfers Jyoti Randhawa, Jeev Milkha Singh and All England Champion (2005) Todd Hamilton, after observing Piyush in the DLF Golf course, are full of admiration for the talents of the 7-year old.

V.P.Singh is an active SPE New Delhi Section Member and is a member of ONGC Golf team. This column is an initiative to share the achievements of SPENDSEC's members and their family. If you have any story to share, please contact the editorial team.

# **SPENDSEC**

In the very first year of its establishment in March 2005, SPENSEC has come out with 6 newsletters starting August '05 and also hosted its website in June '05.

In order to share the technical knowledge and information ONGC reports has also uploaded all the issues of SPENDSEC News.



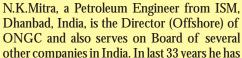
## SECTION OFFICERS

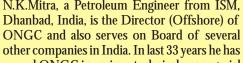
POSITION	NAME / TEL / EMAIL	POSITION	NAME / TEL / EMAIL
SECTION CHAIRPERSON	NILADRI K MITRA Oil and Natural Gas Corporation Ltd. Tel. +91.11.2331.4599 Email: mitra_nk1@ongc.co.in	DIRECTOR	S.K.PATRA Oil India Limited Tel. +91 120 2480952 E-mail: sindhi@oil.delhi.nic.in
PROGRAMME CHAIR	IAN GALBREATH Schlumberger Asia Services Limited Tel. +91.11.26108354 Email: igalbreath@slb.com	DIRECTOR	DR. P. GOPALAKRISHNAN Consultant Reservoir Engineer Tel. +91.11.5166 3820 E-mail: pgopalak@spemail.org
MEMBERSHIP CHAIR	SURESH P SINGH Oil and Natural Gas Corporation Ltd. Tel. +91.11.2240.6481 E-mail: spsingh32@hotmail.com	DIRECTOR	S ROYCHAUDHURY ONGC Videsh Ltd. Tel. +91.11.5129.1100 E-mail: s_roychaudhury@ongcvidesh.co.in
SECRETARY & RAHUL BALI WEBMASTER Oil and Natural Gas Corporation Ltd. Tel. +91.11.2346.3144	DIRECTOR	SUNIL ARORA Oil and Natural Gas Corporation Ltd. Tel. +91.11.22406590 E-mail: arora_sunil@ongc.co.in	
E-mail: bali_rahul@ongc.co.in, rahulbali@spemail.org		PUBLICITY CHAIR	AJAY DASHORE Oil and Natural Gas Corporation Ltd.
TREASURER	RAMENDRA SINHA Oil and Natural Gas Corporation Ltd.		Tel. +91.11.2240.6334 E-mail: dashore_ajay@ongc.co.in
Tel.: +91.11.2240.6524 E-mail: sinha_romendra@ongc.co.in, ramendrasinha@spemail.org	LIAISON YOUNG PROFESSIONAL	ASHOK KUMAR Oil and Natural Gas Corporation Ltd. Tel. +91.11.23301241	
			E-mail: ashok2006@gmail.com

## SPENDSEC Executive Committee Profile

## Niladri K Mitra

Section Chairperson SPENDSEC





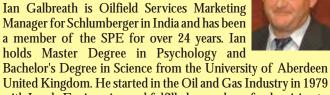
served ONGC in various technical, managerial & administrative capacities. His efforts towards maximizing production from existing fields through new technologies and redevelopment exercises has resulted in improvement in production from declining and matured Brown field like Mumbai High.

An active member of SPE since his student life, he has served on the Board of SPE Mumbai Section in various capacities over the years. He is the Founder Section Chairperson of SPE New Delhi section. He is the Chairman, Program Committee of the first ever SPE-IADC Indian Drilling Technology Conference & Exhibition scheduled in October 2006 in Mumbai.

## Ian Galbreath

Program Chair SPENDSEC

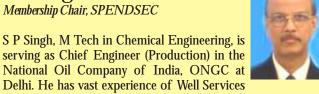
Manager for Schlumberger in India and has been a member of the SPE for over 24 years. Ian



United Kingdom. He started in the Oil and Gas Industry in 1979 with Lasale Engineering and fulfilled a number of roles rising to the level of Managing Director of the company. He was associated with pioneering a number of innovative contracting models. Prior to acquisition of Camco by Sclumberger, he was VP Sales and Operations in North and South America. He has fulfilled a number of roles with Schlumberger as Global Account Director for Occidental and Account Manager for the Well Completions and Productivity Business prior to moving to India

S P Singh

S P Singh, M Tech in Chemical Engineering, is serving as Chief Engineer (Production) in the National Oil Company of India, ONGC at



operations for 26 years, having worked in various offshore and onshore fields. He has been deeply associated with the activities of SPE since 1988. He has served the Mumbai Section as its office bearer since 1994 under various capacities and has been the leading force behind increasing activities and membership for Mumbai Section. He was duly recognized by SPE International who enrolled him in the prestigious Century Club Member. He is a founder member of the New Delhi Section.

## Rahul Bali

Secretary & Webmaster SPENDSEC

Rahul Bali has over 16 years of experience with ONGC primarily in Production Discipline. He holds a Master degree in Management from MDI Gurgaon-a premier Business School in



India, and a Bachelor degree in Mechanical Engineering from REC Jaipur. At MDI, Gurgaon, he was awarded Finance Minister's Gold Medal. As a member of ONGC's B-121 Blowout Control and Abandonment Team, he has worked with International Experts. An active SPE member since 1991, he was instrumental in organizing New Delhi Section and was elected its founder Secretary. He got recognitions during the SPE President's Luncheon- Grand Prize Winner Award at ATCE 2002, Century Club award at ATCE 2003. He is serving on SPE International Membership Committee-2004-2007. He is currently on Deputation to ONGC's Downstream Arm - MRPL, as Chief Engineer (P).

## Ramendra Sinha

Treasurer. SPENDSEC

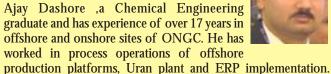
Ramendra Sinha a Chemical Engineering graduate, is serving in ONGC as Superintending Engineer (Production) and has experience of 22 years in offshore & onshore Well Services operations, having started as Work over Engineer.



He has been actively associated with SPE since 1992 and is founder Section Officer of New Delhi Section. He is also serving on Editorial Team of the section newsletter of SPENDSEC News

# Ajay Dashore

Publicity Chair, SPENDSEC

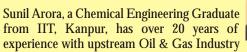




Being a DNVI Accredited Auditor he was instrumental in implementation of International Safety Rating System in offshore process platforms. He has also worked for UOP LLC as Process Engineer in Western Desert Gas Development project, Egypt and Indonesia and was associated with commissioning of first Separex Membrane based gas processing plant in Middle East. As Superintending Engineer (Production) currently working as a core team member of ICE Project, that is responsible for SAP implementation in ONGC. He is a member of the Editorial Team of the section newsletter of SPENDSEC

## Sunil Arora

Director, SPENDSEC



in India particularly with Well Servicing Operations. His managerial and organisational acumen credited him with many assignments including an International Conference of ONGC on "Production Enhancement: New Technological Solutions" as Convener & Member Secretary held at Mumbai in 2001. He has actively served SPE Mumbai Section for over eight years and has many firsts to his credit which include SPE Applied Technical Workshop on "Geosteering: A Multidisciplinary Approach" held in November-December 2004 and is on Program Committee of the first ever SPE-IADC Indian Drilling Technology Conference & Exhibition scheduled in October 2006 in Mumbai. Sunil is presently posted in the corporate office of ONGC in New Delhi as CEA to Director (Offshore).

# Dr P. Gopalakrishnan

Director. SPENDSEC

Dr P. Gopalakrishnan has over 30 years of experience in Reservoir Management and Optimization for companies such as ONGC

and KOC. He has Ph. D. degree from the Institut National Polytechnique, Toulouse, France with basic degree in Petroleum Engineering from ISM Dhanbad, India.

Currently providing technical consultancy on areas such as hydrocarbon potential of new exploration blocks, optimised work-plan for exploration blocks, review of the reserves estimation and categorization, development plans for newly discovered oil and gas fields, underground coal gasification. Å founder Section Officer of SPE New Delhi Section, he has been instrumental in organizing Student Chapter at IIT Delhi

> Profile of remaining executive body members to appear in next issue.

# SPE New Delhi Membership Doubles

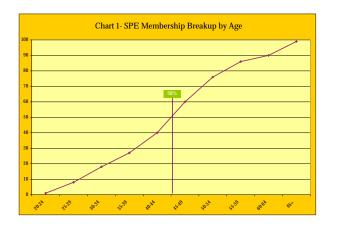
Rahul Bali.

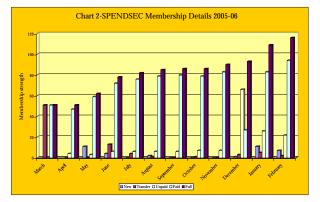
Member, SPE International Membership Committee

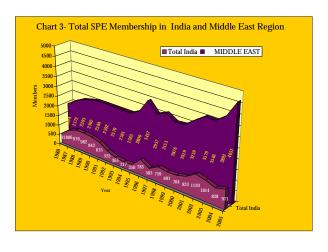
In the last edition worldwide SPE membership growth and membership growth in India across the four section was shared with you. The average age of SPE members, despite a slight increase in Young members remains at 45+. Chart 1.

The membership growth in New Delhi section is shown in Chart 2. From a meager 51 members in March end 2005 we are now at 116 as per February end data, an increase of 127.5 % in the first year. With this remarkable achievement, we already appear at No. 1 Position in our group in the annual membership contest for the sections.

Chart 3 shows the total membership in India and in Middle East region. India has nearly 20% of middle east members.







Charts compiled based on the SPE Membership Statistics

# Membership from Here to There





The Society of Petroleum Engineers covers more ground than you think. Our 64,000 members in 110 countries receive far-reaching benefits. For example, local meetings, regional workshops and international conferences help

members gain technical advantage. And our eLibrary puts over 40,000 technical papers in the hands of our members, no matter where in the world they are. Find out everything SPE can do for you at www.spe.org.



