

KOLKATA 2006 – An Overview

Society of Petroleum Geophysicists, India organized its 6th international Conference and Exposition at Science city, Kolkata during 9th to 11th January, 2006 in association with SEG and EAGE. The conference for the first time was held under enhanced level-III+ support from SEG, USA for technical and organizational enrichment. President (Elect) of SEG and President EAGE both participated in the conference.



Theme of the conference, “Geophysics for Mitigating Exploration Risks” was appropriately chosen to underscore the need of minimizing the uncertainties involved in the hydrocarbon Exploration and Development, particularly in today’s scenario when finding ‘new oil’ in complex and logistically difficult terrain/ environment is getting immensely challenging.

The conference was inaugurated by the Union Minister of State (Independent Charge) for Science & Technology and Ocean Development, Government of India. In his inaugural speech, Mr Sibal described the discipline of geophysics as having no confines of territory and charged to perform global function of providing energy and sustenance. Noting that the past two decades had seen momentous strides in technology development, Mr Sibal hoped that we would sometime have experts who have the skills to hit the oil directly. He also stressed upon the need of developing alternate energy sources stating that the alternate energy not just the human need but to leave the planet system unaltered. ‘We must leave this planet much better than we inherited’. Noting that exploration is knowledge intensive, he suggested that the embedded knowledge should not be lost and should be handed over through a proper skill identification process and an appropriate mentoring mechanism.

Hon’ble Minister conferred the ‘B S Negi Convention Gold medal’ to Dr B K Bose, former GGM (Exploration). Mr T K N Gopalaswamy, Mr D K Gupta. Mr N C Nanda and Mr Kuldeep Chandra were bestowed with the Lifetime Honorary Membership Awards.

Mr Apurba Saha, President SPG, India in his welcome address, highlighted the importance being placed by SPG on the younger generation by organizing many programmes for students including a job fair being arranged for the first time in such conference.

Mr D K Pande, Patron SPG, at this occasion, talked about the need of fusion of mind and technology for higher success percentage. He hoped the conference would ignite minds and congratulated the SPG President for satisfying and rewarding experience.

Mr Gareth Williams, President EAGE spoke high about technical content of the sessions. He underlined that the understanding among geophysicists, geologists and engineers is critical to future understanding.

Mr Leon Thomsen, President Elect SEG said that among 50 associate members, SPG, India is the largest single agglomeration of professionals. He wished SPG 2006 a successful congregation. The Souvenir, Geohorizons, Proceedings of ‘Kolkata-2006’, and DEW’s special issue were released on the occasion. Kolkata was acknowledged as a traditional city of science through screening of a video film on eminent scientists from Kolkata and their contribution in the inaugural session.

Prior to formal inauguration of the Conference, a golf tournament was organized for the first time by SPG on 8th January, 2006, which was inaugurated by Col S P Wahi, former Chairman, ONGC. Over fifty participants displayed their golfing skills at Tollygunge Golf Club, Kolkata.



Later, in the evening, a press meet called, which was well attended by media persons from leading news papers and electronic media. President SPG presented a curtain Raiser giving the highlights of the main events of the Conference.

Over 1300 delegates all over the world participated in the conference. The delegates included about 200 overseas participants.

Rich technical content was highlight of the conference. Over 284 technical presentations including 33 key note papers and invited talks were made during the conference. This included 63 overseas contributions. Total technical presentations were divided in to 130 oral and 154 poster presentations covering wide range of varied topics were presented during three days of the conference.



The Technology Exposition had a record 74 booths as compared to 48 in the last event. The participation of 40 companies from 23 countries made the SPG truly broad based. Along with the technical societies like SEG, SPG, EAGE, APG, PETROTECH, the E&P and Service companies like ONGC, Schlumberger, WesternGeco, Landmark, Paradigm, Veritas, SGI, Intel, IBM, Sun, Fugro, Hampson Russell, EMGS, Amur Shipbuilding Plant, CGG, Sercel, Vibtech etc., made their prominent presence felt in the exposition. Sun Microsystems was adjudged best exhibitor and WesternGeco as the second best. The theme session contained speeches by four distinguished geoscientists.



Mr D K Pande, Director (Exploration), ONGC stressed on the importance of mitigating risks in hydrocarbon exploration using geophysical methods as they help in reducing risks and cost. Mr Leon Thomsen, President-elect, SEG said Geophysics clarifies risk in subsurface exploration. Most of the oil has been found. Production geophysics is what is needed now. Mr Gareth Williams, President EAGE spoke about the emerging technologies in geophysics.

Mr S K Patra Director (E&D), Oil India Ltd., talked of different types of risks in exploration like geological, demographic and financial. He also dwelt upon various methods used in geophysical surveys.

On 10th morning, the delegates were in for a pleasant surprise. A spiritual touch was brought to otherwise technical conference by swami Jitatanandji of Ramakrishna Mission. In his soothing address, swami ji advised the audience to get in touch with the 'infinite' within.



Swamiji told that two great principles of Indian Philosophy, namely, 'infinite in the finite' and the 'interconnectedness' of everything in universe have been verified and established in the modern science. Lord Krishna said the same in Bhagavat Gita when he said, "I am all pervading like the thread through the beads in the necklace". You cannot hurt someone without being hurt yourself.

Students were everywhere in the conference. SPG strongly supports the idea of bringing the geosciences students closer to the industry and it was evident in the conference. Many programmes were structured aiming at the students, right from school going children to University



Graduates, majoring in Geophysics. About 240 students of a number of leading schools from Kolkata participated in the School students programme. The idea behind this programme was to encourage the younger students to take up Geosciences as career in future by bringing awareness among students about geophysical techniques and its application to oil industry. Prof Meher Engineer addressed the young students with thought provoking issues related to mother earth like global warming. The children were given live demonstrations, explaining the basic seismic data acquisition and processing. Other geophysical methods were also explained through posters and models. A video film on seismic data acquisition was also shown to them. The students as well accompanying teachers enjoyed the experience.

Fifty two students from 9 universities took part in various student related activities in Kolkata 2006 that include 'poster presentation', 'Students forum' and 'Geoscience Quiz'. Fourteen posters were presented by the students in the conference and some of the posters did catch the attention of delegates. The students forum was structured to understand the students perception of the industry and their expectations. A panel of 18 students from 9 universities participated in an interesting interaction with a professional panel led by Dr A K Balyan, Director(HR), ONGC. The discussions brought out many interesting points related to internship, gender bias, update of curriculum etc. Dr Balyan mooted the idea of students spending their summer project period in the field. He also welcomed the suggestion of regular lecture series at institution's campus and said he would be happy to send experts. He remarked SPG could play a catalytic role in this matter.



Quiz is always a mix of fun & excitement and so was the 'students' quiz', organized immediately after the students' forum. Nine teams from different academic institutes participated in the quiz. The NGRI team came up as winner and Andhra University as Runners up.

However, the biggest attraction for the Geophysics students was the 'job fair', organized for the first time in a technical conference. The 'job fair' reflected the true concern and sincere efforts of the society for providing a meaningful platform to budding geophysicists. About 180 students registered for the Job fair, wherein Prospective employers and aspiring candidates came together under one roof.

Dr A K Balyan, Director (HR), ONGC inaugurated the job fair. The novel idea of 'job fair' by SPG, India was appreciated by one and all.

While the delegates were busy in the technical sessions or discussing business, accompanying spouses were taken care of through thoughtfully designed 'Spouses' Programme', that included a wide spectrum of



activities, from cooking lessons at Hotel ITC Sonar Bangla to sightseeing and shopping.

The GAC meeting was arranged on 9th January, 2006 at Hotel ITC Sonar Bangla which was attended by SEG, EAGE and SPG. Some of the issues, discussed in detail, during the meet were opening of SEG office in India, SEG-SPG Quiz and promoting the student chapters.

The CEOs' meet, first of its kind in the conference was held on 10th January, 2006. CEOs of three major companies, viz., Mr Robert Brunk, CGG, Bob Peebler, I-O, Eldad Weiss, Paradigm along with Mr D K Pande, Director (Expln), ONGC shared their views on risk mitigation in exploration. Technology was the centre of discussion at CEO's meet. Mr Brunk highlighted the need of revisiting existing exploration blocks with new technologies. He said that the key success drives are skilled people, integration in work flow, shortening innovation-adoption cycle, performance and leadership.

Mr Bob Peebler of I-O touched upon the 3rd wave of Geophysical technology development, shrinking of prospect inventories and increasing finding & development costs. Mr Eldad Weiss discussed the technologies that empower the geoscientists to mitigate the exploration risks, enable making informed quality decisions while accelerating prospect generation and reservoir exploitation. Technology that supports large scale computing, visualization at desk top for faster interpretation of multiple data sets, integrated into E&P work flow are the need of hour. Mr D K Pande expressed concern for energy security in the changing scenario. He informed that future challenges are exploration of subtle traps, frontier areas and imaging under basaltic layers. The focus sectors are deep waters, thrust fold belt, sub-trappean Mesozoic sediments, development of unconventional hydrocarbons like basin centred gas, Coal Bed Methane, Gas hydrates etc. Technology is the key driver for mitigating the exploration risks and enhancing production in the years to come.



The cultural evenings on 9th and 10th Jan, 2006 immersed in Indian heritage, followed by banquets. A rainbow of art and culture was put on display by internationally renowned artists. On 9th January, Mr P C Sorcar, Young mesmerised the audience through his spectacular magic show. On 10th January, it was Jogesh Dutta's mime show and then the dance drama of 'Amritasya Putra' by Mamata



Shankar Ballet Troupe, which left the audience spell bound.

The proceedings on 11th January, 2006 started with an invited talk on stress related health hazards in today's life by a group of senior specialists from Apollo Gleneagles Hospitals, Kolkata led by noted cardiologist Dr Robin Chakraborty.

In the 'Business Forum' on 11th January, 2006, Mr S V Rao, ED-E&D, ONGC and Mr S Roychaudhury, GGM, OVL delivered talks on the business opportunities offered in India and abroad by ONGC and OVL respectively. Mr Rao pointed out that there are vast opportunities in the Country for exploration intensification both for conventional and unconventional hydrocarbons and coming years will witness an upsurge in data API programme in various acreages both onland and offshore. Mr Roychaudhury informed the audience that India is the nearest growing market to M. East, Sakhalin and Far East. He talked of OVL's international presence and business opportunities.

Four invited talks were delivered on the concluding day. Dr John Kaldi, past president AAPG spoke on Carbon sequestering. He wanted geoscientists to think of the effects of carbon concentration in the atmosphere. Dr Kaldi opined that oil industry can play a positive role in Carbon sequestering and thereby containing the catastrophe.

Dr Robert Stewart of University of Calgary talked about geophysical applications in archeology with some interesting case histories. He felt that geophysics could detail the information through its non-invasive, non-destructive methods of probing.

Dr Peter Duncun, last president of SEG talked of microseismics. Monitoring the changing picture beneath the ground can be accomplished with the microseismics, although the subject is in nascent stage, he said. He gave examples of many types of monitoring like fault creeps, steam flooding, gas injection etc., where microseismic have helped in avoiding costly mistakes.



Dr Oz Yilmaz spoke of two other branches of seismology – earthquake seismology and engineering seismology. He illustrated how geotechnical engineering and soil technology could benefit from geophysics. Speaking in the valedictory function, Mr D K Pande, Director (E) and Patron of the society said that entire gamut of geophysics were covered in the three day conference.

The job fair, he indicated was a pointer towards enhanced social commitment. President SEG and EAGE lauded the professional conduct of the conference.

Mr Apurba Saha, President SPG said that the conference has been successful going by the feedback and called for the younger generation and professional bodies to come closer.

The conclusion of the conference was marked by another musical performance by Grammy award winner, Mr Bikram Ghosh who rendered his signature repertoire Rhythmscape at the valedictory function.

Mr C H Mehta, Vice President, SPG proposed vote of thanks to acknowledge the help and support from different quarters for making Kolkata-2006 a great success.

