



LKMT



Workshop on  
“Transportation of Oil & Gas through Pipelines”  
(July 08-10, 2009)

**Report:**

In its endeavour to enhance and strengthen Industry Academia Interface, a three-day workshop on ‘Transportation of Oil & Gas through Pipelines’ was jointly organised by Petroleum Federation of India, IndianOil Institute of Petroleum Management (IIPM) and Lovraj Kumar Memorial Trust (LKMT) from July 08- July 10, 2009 at IIPM Gurgaon. A study tour was also undertaken to the Mathura-Jalandhar Pipeline (MJPL) terminal at Bijwasan on July 9, 2009.

The primary objective of the programme is to share the experience of Oil and Gas professionals with the teaching faculty (Lecturers/Professors of Engineering Colleges/Universities) to enhance their knowledge which in turn will help students in acquiring knowledge required by the Oil and Gas sector for their effective performance in the sector. Faculties from various AICTE approved Engineering Colleges / Universities in and around Delhi participated in the programme. In all, thirteen teaching faculty, 9 from Chemical Engineering department and 4 from Mechanical Engineering department participated from seven Engineering Colleges (representing four states). The list of participants is enclosed as Annexure I. All participants were provided free boarding and lodging by Indian Oil Corporation Ltd. at their IIPM Training Institute at Gurgaon and there was no participation fee for the programme.

The course content of the programme was finalized in consultation with IOCL. Programme details are given in Annexure II.

Out of the 13 lectures included in the programme, 8 were delivered by experts from IOCL, 4 by experts drawn from Engineers India Ltd and 1 from GAIL India Ltd. A CD and a booklet (Annexure III) containing copies of the lectures was given to each participant.

Shri K.K. Gupta while welcoming the dignitaries and participants informed about the active involvement of IIPM in arranging such workshops for mutual benefit of the Industry and the Academia. He expressed his thanks to PetroFed for arranging such workshops and inviting experts from industry to share their knowledge and experience with the academia and also explained the programme details.



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The workshop was inaugurated by Shri B M Bansal, Director (P&BD), IOCL. Other dignitaries present during the inaugural session were S/Shri Anand Kumar, Director (R&D), KK Jha, Director Designate (PL), J P Kapur, Trustee, LKMT, Dr I B Gulati, former Director (IIP) and Trustee (LKMT), B D Gupta, former Dir (F) IOCL, K K Gupta, ED, IIPM, and S Ramasamy, ED(CO-IS) .

In his address, Shri K.K. Jha, congratulated PetroFed, IIPM and Lovraj Kumar Memorial Trust for organizing Industry Academia Interface Programme - 'Transportation of Oil & Gas through Pipelines'. Shri Jha invigorated the history and origin of oil pipelines in the world and India. He touched the various historical/technological changes in the pipelines sector since it was introduced in 1865. In India, the first pipeline was built 100 years back when the first crude oil pipeline was laid from Digboi oil fields to Digboi Refinery. The first cross country product pipeline was laid in eastern part of the country by IOCL during 1962-64 to transport finished petroleum products from Guwahati Refinery to Siliguri. Explaining the benefits of pipelines transportation, he also touched the latest advances and development in this sector and stated that India is yet to explore the full potential. He emphasized that the rapid growth of pipelines is essential to achieve economies of scale for oil & gas transportation in the country.

Shri B.M. Bansal in his inaugural address appreciated the initiative taken by Petroleum Federation of India and LKMT in organizing this important workshop. He informed the participants that long distance pipelines are the most viable, economical, safest and the most environment friendly mode of transportation for crude oil, petroleum products and natural gas. He stressed that recent off-shore discoveries of gas on the Western Coast and the Eastern Coast and on-land in Rajasthan, necessitate huge investments in gas pipeline infrastructure for creating a national gas pipeline grid. He touched upon the importance of proposed cross-country Iran-Pakistan-India (IPI) gas pipeline project and its importance for India's energy requirements and energy security. He also informed about other cross country pipeline projects under consideration, such as, Turkmenistan-Afghanistan-Pakistan-India (TAPI) Pipeline; Myanmar-(Bangladesh)-India Pipeline; Central Asia-China-India Pipeline, etc. He expressed his happiness regarding holding of this industry academia interface programme for upgrading the knowledge and skills of the faculty of the engineering colleges.

Shri Anand Kumar in his address deliberated on the R&D initiatives taken by IndianOil in the field of transportation of petroleum products by pipelines. He informed the participants about the successful development of indigenous intelligent 'PIG', for checking and recording the health data of pipelines while drawing its parallel with angiography investigation. He also dwelled on the



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problem of corrosion in pipelines and mentioned about the advances made in this area. Shri Anand also explained the participants that transportation of oil and gas through pipelines is the environment friendly mode of transportation. Shri J.P. Kapur, in his presidential address emphasized the need of such workshop intended for upgrading the knowledge of faculty of the engineering institutes which in turn will benefit the students and the oil and gas sector when students from the institutes serve the industry. He reiterated that the efforts of LKMT in association with PetroFed will continue in this direction and more and more relevant areas will be covered in future workshops.

Dr. I.B. Gulati also addressed the participants explaining the importance of the programme. He exhorted the industry to actively engage with the academia and consider it as their corporate national responsibility. He thanked the IOCL Management for sponsoring this programme and also the programme which was held earlier at Gujarat Refinery. Contributions made in this direction by the industry will go a long way in improving the Industry-Academia Interface mission undertaken by LKMT and PetroFed. Shri A.K. Arora, Director General, PetroFed requested participating institutions to indicate various other areas for such faculty upgradation programmes.

Shri S.L. Das proposed the vote of thanks.

#### Feedback from the participants:

- Overall programme effectiveness: 90%
- Greatly benefited from the programme
- Requested more coverage on cathodic protection, design of pipelines and fluid mechanics
- Suggested longer duration of the programme
- Suggested one full day site visit
- Suggested academia be involved in R&D projects and problem solving
- Suggested coverage on Flow meters/ Turbine meters, Valves and their applications
- Requested recommendation of books for institute library by the speakers related to their field.
- Suggested more video clippings on the topics