

Manpower

Creating the Workforce for the Booming Offshore Sector

Prof Paritosh Banik

Growing demand of petrotech professionals is a challenge oil and gas industry is facing in the E&P sector. Prof Paritosh K Banik, Director General, Pandit Deendayal Petroleum University (PDPU), delves over the manpower crunch in this field.

The key issues faced by the E&P sector are scarcity of manpower: Petroleum Engineers, Petro-physicists, Drilling Engineers, Production and Operation Engineers, scarce entry level talent, low industry awareness, low industry attractiveness, aging workforce, overseas job opportunities and retention. India has to adopt key initiatives with a proactive view, in order to address these challenges at various levels- education, government, industry, and systemic organization.

The Need of the Hour

“As per Petrofed studies, India produces about 400 plus students for upstream petroleum sectors, mainly petroleum engineers, geologists and geophysicists. Most of these skills are in excess today in India, but they are now global com-

modities and there is expected to be a critical shortfall for this skilled manpower in next 10 years,” said Prof. Paritosh K. Banik, Director General, Pandit Deendayal Petroleum University. By the end of May, 2011 nearly 487 Petroleum Engineers are expected to graduate (B.Tech. in Petroleum Engineering). So, presently there may be sufficient skilled manpower to meet the demand-supply gap.

He further informed, that there are five institutes namely; Indian School of Mines (ISM), Dhanbad(1957), Rajiv Gandhi Institute of Petroleum Technology (RGIPT), Raebareli(2008), Madras Institute of Technology (MIT), Pune(1983), University of Petroleum and Energy Studies (UPES), Dehradun (2003) and Institute Petroleum Technology (IPT), Gandhinagar(2007) which are capable to fill in the resources, infrastructure, faculty, and state of the art laboratory to train the students in India.



Prof Banik in discussion with students

Industry based courses, course curriculum, industry based R & D projects and students' projects along with highly qualified and experienced faculty members are the unique selling point of the university.

Indian Institute for Petroleum Engineering courses

- Indian School of Mines (ISM), Dhanbad(1957),
- Rajiv Gandhi Institute of Petroleum Technology (RGIT), Raebareli(2008)
- Maharashtra Institute of Technology (MIT), Pune(1983),
- University of Petroleum and Energy Studies (UPES), Dehradun (2003)
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Challenges in Matching Requirements of Industry's Manpower

Presently, petroleum industry in India is facing the acute shortage of qualified manpower for the upstream sector. He stated that PDPU is gearing up to take up this challenge by providing best talents in this field. It is expected that the industry should closely work with the academics in updating the syllabus, involving faculty members in their research and developments. Industry-academia interactions should be more and more to cater the industry as per their needs. Students seek an attractive salary with scope for promotion to

higher positions.

"Income potential, high-tech environment, opportunity to travel, family in industry, jobs in home region and known manpower demand; these are the major verticals that are of more interest for the students. New areas in hydrocarbon sector like Shale Gas, Coal-Bed Methane and Gas Hydrates are key verticals in which students are going to see the growth in the oil and gas industry," said Prof Banik.

It is envisaged that by 2017 Indian demand for skilled manpower in the upstream sector alone would be around 800 petro-technical students out of which 600 would be required by 2012. Besides all the above mentioned proposed activities,

487 petroleum engineers expected to graduate by May 2011. By 2017 demand of skilled manpower to reach 200 in upstream sector.

the situation may further be aggravated by the recruitment of the talents by multinational oil companies with more attractive pay packages, and by the retirement of a huge number of skilled manpower that was recruited during late 70s and early 80s.

Global Professionals

At the end of first year of their B.Tech course students undergo Rural Internship for 21 days across the villages of India. At the end of second year, students are sent for Industry Orientation so they can learn the functioning and the scenario of the Industry. At the end of the third year, students are sent to various industries for training. They work and get trained under personnel's of the industry to understand the work in a proper manner to be recognized as global professionals. He informs, "Our first batch of B.Tech students in petroleum sector would graduate this year and for their placement nearly 200 industries have been contacted. We look forward to some great results." International Educational Exchange Program has helped the students to get a clear picture of Petroleum Engineering education in US universities along with the work culture of US petroleum companies.

He affirms "It has also motivated our students to pursue their higher studies in USA after their graduation." Finally, the students also got acquainted with American lifestyle as well which helped them to develop their self confidence and personality. It is envisaged that Pandit Deendayal Petroleum University will produce the best Petroleum Engineers from the country to cater the manpower demand in the Petroleum Sector of India. It is also planned that PDPU will emerge as an Educational Hub for the entire world. ■