

# Business Interview

## Unconventional oil sources may impact

Osayande Igiehon is the chairman, Society of Petroleum Engineer (SPE) Nigeria Council. He has about 20 years experience in reservoir and petroleum engineering, strategy and planning, business improvement and operations management in Nigeria, Netherlands and Russia. In this interview with **ROSELINE OKERE**, he bares his mind on the challenges of the country's oil and gas sector and the role of petroleum engineers in ameliorating these challenges. Excerpts.

**H**OW has the awards of marginal oil fields assisted the Nigerian engineers in respect of skill development?

The marginal field programme was visionary in intent but post-award implementation has been challenging. 10 years after the fields were awarded, seven of the 24 fields are on production. This provides food for thought, for all stakeholders to consider the learning points, with a view of being able to close the gap with expectations, both for the first set of fields awarded and for future programmes. My overall stance is one of expectation of further improvement, noting the successes so far recorded have proved the concept.

SPE Nigeria contributed to the articulation of the initial programme by providing the platforms where some of the initial ideas and strategies were seeded and discussed in the late 90's and early 2000's. Since then, SPE has continued to provide programme to further the discourse on the related joint issues of monetising marginal fields and increasing indigenous partici-

comes all industry stakeholders to the Oloibiri Lectures and Energy Forum.

Also, as part of the this year's NAICE, there is the plan to hold a workshop to discuss 'Best Practices in Marginal Field Development and Production', where operators who have put their fields on production will be invited to share their experiences with the industry. This promises to be one of the most exciting and attended oil industry workshops of the year 2013. Again, SPE welcomes the industry to the 2013 NAICE, which promises to be a landmark for the year.

**Recently, the Department of Petroleum Resources began to raise alarm over the declining state of the country's crude oil reserve. What is the expected role of the petroleum engineers to this challenge?**

In the main, recoverable reserves result from a combination of technical, economic and other factors. Reserves growth can be achieved from exploration and from improving the recovery from already discovered hydrocarbons-in-place, to a level that is higher than what is produced, a

umes that will include drilling more wells, putting in more artificial lift systems and increasing the use of secondary and EOR recovery techniques. On the economic front, reducing costs is going to be key to increasing recoverable hydrocarbon volumes.

Petroleum Engineers is well positioned to address these technical and economic evaluation challenges and is doing so in the government organizations and various companies.

**Is the Nigerian petroleum engineer adequately involved in running the Nigerian oil and gas industry?**

The involvement of the Nigerian petroleum engineer in running the Nigeria Oil and Gas industry has increased steadily over the years and has been enabled by the Nigerian Content Act and the active uptake of this initiative by the industry.

Today, the demographics of the Nigerian working in the industry are more favourable than in the past, the number of indigenous service companies and operating companies are on the rise.

the global energy demand - supply equation. The potential size of this resource is of the magnitude that requires a deeper consideration of the short, medium and long-term impact it could have on Nigeria oil and gas industry. This is of particular importance, given our position as the sixth largest crude oil exporter and 14th largest Natural gas exporter in the world, of which about 95 per cent of our foreign exchange earnings and about 80 per cent of our budgetary revenues are derived.

In the early release (reference case) of USA's Energy Intelligence Agency's 2013 Annual Energy Outlook, a sharp rise in domestic crude oil production from tight oil play over the next decades is forecasted. Further, dry natural gas production is projected to increase, mostly from unconventional plays (tight sand and shale's), such that by 2020, domestic production will outpace consumption by 2020, thereby spurring net export of gas. There are other scenarios of this forecast that predict earlier or later cutover from net importer to net exporter.

On 20th February 2013, Platts website (a leading