

Expert Highlights Role of Structural Engineers in Oil and Gas Industry

The evolvement of different exploratory methods in the oil and gas industry will constantly need the inputs and craftsmanship of structural engineers for optimum performance, safety and reliable environment, a Structural Engineer, Engr. Babatunde Oni, has said.

Engr. Oni, a Senior Engineer at DeltaAfrik Engineering Limited, who was Guest Speaker at the Town and Gown seminar of the Department of Civil Engineering, Covenant University, made the submission while delivering a lecture titled, 'The Role of Structural Engineers in the Oil and Gas Industry' on Thursday, November 3, 2016.

The relevance of any structural engineer in the oil and gas industry, he posited, would depend largely on the individual's ability to analyse, design, plan and research structural components and systems that enable performance, be it in the upstream, midstream or downstream sector of the oil and gas industry.

"To achieve designed goals and ensure the safety and comfort of users or occupants, the structural engineer's work must take into account mainly, the safety, technical, economic and environmental concerns, while also considering aesthetic and social factors," he said.

Engr. Oni highlighted that all offshore developments are generally driven by economics and a combination of factors such as international oil and gas prices and market availability, reservoir type and recoverable quantities, completion type (Wet Tree/Dry Tree), water depth, environmental conditions, hydrocarbon processing requirements, utility requirements, installation method, regulatory requirements and hydrocarbon export methods.

"With over 7,000 offshore platforms used for exploration of oil and gas from under the seabed and processing around the world in water depths of up to 1,850m, it is imperative to understand the sizing of platforms taking into consideration the classification of water depths if they are shallow, deep or ultra-deep waters," he explained.

The Guest Speaker told the students that irrespective of the aspect of civil engineering they decided to embrace, there was need for those with interest in structural engineering to understand what was expected of them in the oil and gas industry. According to him, "To be successful in the oil and gas sector, you must be able to analyse, calculate and design right, draw out and design reports, come up with appropriate Material Take-Off (MTO) draft and procurement."

He advised would-be structural engineers to always subject their modeling stages through structure geometry selection processes, geometry simulations, load simulations and foundation simulations.

Earlier, while welcoming the guest speaker and the audience, the Head, Department of Civil Engineering, Dr. David Olukanni, said the competition in the job market was much, and leveraging on relationships with the various speakers that had graced the departmental seminars was a vital way to quickly break the ceiling in career paths.



Faculty, Staff and Students of Civil Engineering Department with the Guest Lecturer

Dr. Olukanni further stated that what the students were being taught was geared at tasking their minds, brains and thinking processes and therefore urged them to appraise themselves periodically to know if they are getting enough from what the Department of Civil Engineering had in stock for them.

Also at the Town and Gown seminar were members of faculty and staff of the Civil Engineering Department.

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