

Engineering, Manufacturing Crucial for Industrialisation - Professor Oyawale

A synergy between engineering and the core manufacturing sub-sector is absolutely necessary if Nigeria must attain the status of an industrialised nation, a senior faculty at Covenant University, Professor Festus Oyawale, has asserted.

The professor of Mechanical Engineering made the submission on Friday, November 10, 2017, while delivering the 11th Inaugural Lecture of Covenant University titled, 'Engineering and Manufacturing: A Sine Qua Non for Pertinence' (<https://goo.gl/L5J3fp>).

Justifying the imperative of Nigeria working towards industrialisation, the inaugural lecturer said that the advent of the Numerical Control machine soon after the Second World War, its graduation to the Computerized Numerical Control (CNC) machines and, subsequently, to the adaptive manufacturing robots that can work next to humans, had helped industrialised nations and manufacturing companies to improve their productivity in both manufacturing planning and production processes.

Nigeria, according to Professor Oyawale, has an array of technologists, technicians, engineers and artisans, many of whom are more qualified than their counterparts in the industrialised countries, but a host of Nigerian graduates is unemployed while many more are partially employed. He lamented the inability of Nigeria to join the league of industrialised nations in spite of efforts made over the years.

Professor Oyawale, however, posited that Nigeria is not bereft of ideas, as exemplified by the launch in 2014 of the Nigeria Industrial Revolution, which was based on a philosophy of broadening the scope of the industry and accelerating the expansion of the manufacturing sector.

Noting that Science, Technology, Engineering and Mathematics (STEM) have been neglected for too long in Nigeria's secondary schools, the inaugural lecturer argued that STEM will elevate Nigeria's position in the global economy and give her students the skills they need to successfully compete with talents from around the world.

On his prescribed panacea to the challenges of industrialization, Professor Oyawale said that, students' projects and local entrepreneurship efforts should be geared towards the production of automotive and machine components; and establishment of private steel companies should be encouraged.

The inaugural lecturer did not end his lecture without acknowledging that, Covenant University has been blazing the trail in the provision of hi-tech training equipment (a 3D printing machine and a CNC machining centre) in the Mechanical Engineering Department, which is fast establishing a working relationship with private manufacturing outfits to produce components for the open market or tailor-made for the oil and gas sector through additive manufacturing.

Giving her remarks about the lecture, the second substantive Vice-Chancellor of Covenant, Prof. Aize Obayan, representing the Chancellor and Chairman, Board of Regents, Covenant University, Dr. David Oyedepo, said the inaugural lecturer, through his lecture, has emphasized that Nigeria can actually put a lot of things in place for her to take leadership in this part of the world by the products the country is able to bring to the fore.



Professor Festus Oyawale, delivering the 11th Inaugural Lecture of Covenant University titled, 'Engineering and Manufacturing: A Sine Qua Non for Pertinence'

According to Professor Obayan, the relevance of engineering and manufacturing to industrialisation and national development cannot be underestimated. Quoting Dr. Oyedepo's popular saying that, "It doesn't have to be white to be right", she said the era of paper publications only was over and academics must put research to work.

While appreciating God for what He has continued to do via the visionary leadership across several platforms in Covenant University, resulting in several innovations and creativities, Professor Obayan acknowledged that Covenant University is blazing the trail in engineering, not only in the research papers but as well as some products.

Earlier in his welcome speech, the Vice-Chancellor, Covenant University, Professor AAA. Atayero, said that the 11th Inaugural Lecture was unique in the sense that it was ushering in a five-year countdown towards the fulfillment of the University's vision of becoming one of the top 10 universities in the world, dubbed Vision 10:2022.

Apprising the audience with Covenant's rising profile in the field of research based on recent computations by Elsevier SciVal, the strategic data analysis tool employed by ranking bodies worldwide, the Vice-Chancellor said that the University has already emerged a clear world leader in some distinctive competencies.

He explained: "With over 660 publications, Covenant University produces 14% of the top 86 research authors in Nigeria. The authors were ranked among top 500 authors by the number of publications within the years 2012 and 2017.

"It will also interest this gathering to know that the output of Covenant University researchers accounts for a significant percentage of publications recorded in Scopus in Nigeria in 2016, particularly 13.7% of the total Engineering publications, 21.4% of the total Computer Science publications, 22.1% of the total Business Management and Accounting publications, and a whopping 26% of the total publications recorded in Scopus for Nigeria in 2016 are for Covenant University. This is in a country with a total of 155 universities - 40 federal, 46 state and 69 private; you will agree with me that God is doing marvelous things in Covenant University."

Noting that it was an established fact that no country can join the league of industrialised nations without a strong base in engineering and manufacturing, Professor Atayero said the 11th inaugural lecture was very germane as it addressed the salient issues of manufacturing and engineering. He expressed his delight that, to do justice to the topic was none other than Professor Festus Oyawale, an erudite professor of manufacturing engineering and a former Head of the Department of Mechanical Engineering of Covenant University.

Also present at the inaugural lecture were other members of Management of Covenant University, Principal Officers, members of the University Senate, distinguished guests including family members of the inaugural lecturer, faculty, staff and students.