How Nigeria Can Leverage Nanotechnology for Development

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Reportedly, the benefits of nanotechnology include energy-efficient products such as fuel and solar cells, improvements in manufacturing that allow for durable, light-weight, efficient production tools, while leading advances in disease treatments, such as cancer, better imaging and diagnostic equipment.

The technology, which is yet to receive needed adoption in countries like Nigeria can also address environmental and agricultural challenges.

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The minister noted that the development could drastically unlock the nation's energy sector, environment, agriculture, as well as provide, needed solutions to the health challenges in the country.

"Remarkable advancement is being made across the globe for the application and utilisation of this knowledge in various fields to enhance the quality of life of humans. We endeavour to harness this technology to fast track our national industrial development," Onu stated.

Okwuosa noted that nanotechnology could provide an alternative modern technology as a means of solving immediate societal problems.

With the organisation at the forefront of investment in expanding the technology in Nigeria through a centre in the University of Nigeria, Okwuosa noted that the company would continue to lend its support to the Nanotechnology Research Group, believing that continued support and collaboration would create the much-desired value for the country and the continent at large.

He said: "Research and development in nanotechnology would play a leading role in putting

Nigeria on the global map of scientific and technological achievements."

Okwuosa stated that in the energy sector, technology could make energy more efficient, cost-effective and safe, adding that it provides the potential to enhance energy efficiency across all branches of industry and to economically leverage renewable energy production through new technological solutions and optimized production technologies.

With a fast-growing global population, the Chairman said, application of the technology in the agriculture sector would increase food production in a sustainable manner and protect crops from pests.

"This is essential especially with the projected increase in world population to over 9 billion in the year 2037 (next 16years) which will pose serious problems if food production is not enhanced," he said.

If properly applied, Okwuosa said the initiative would improve crop productivity using nanomaterials in targeted crop genetic engineering and smart monitoring of plant response to environments with nanosensors, stressing that the nanomaterials would increase crop productivity using Nano fertilizers and Nanopesticides.

Stressing that need for the application in the environment and health sector, Okwuosa lamented that the application of nanotechnology in various fields has been slow and suffered from several challenges.

According to him, in developing countries like Nigeria, resources for contribution to front-line science has been a mirage, as the cost of acquiring intellectual property rights remains high.

Read the original article on The Guardian.