OPEN ELECTIVE – A

APPLIED CHEMISTRY FOR ENGINEERS

Starting: April 2021 Credits: 3 Eligibility: Students of all Branches in Engineering



Fullerene

Occupation Salary (INR/ USD)

Researcher in Nanotechnology Starting at 14 Lakh/Yr.

Nanotechnology Engineering Technicians: Starting at \$30,000 /Yr.





WHY?

At the nanoscale, the chemical, physical and biological properties of materials differ in fundamental and valuable ways from the properties of individual atoms and molecules or bulk matter.

Nanotechnology is directed toward understanding and creating improved materials, devices, and systems that exploit these new properties.

Economic Impact of Nanotechnology

According to "The Nanotechnology Opportunity Report (NOR)," 3rd Edition Cientifica Ltd., published in June 2008

"The market for products enabled by nano-technologies will reach US\$ 263 billion by 2012."

"The highest growth rates will be in the convergence between bioand nanotechnologies in the healthcare and pharmaceutical sectors."

WHAT WILL YOU LEARN?

Basic knowledge of Nanotechnology, Nanomaterials and its applications. Nanotechnology is the understanding and control of matter at dimensions of roughly 1 to 100 nanometers, where unique phenomena enable novel applications. Synthesis of Nanomaterials like fullerenes, carbon

nanotubes and nanowires using top down and bottom-up approaches and its applications in different fields like Medicine and Automobiles

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