THE NANOENGINEERING

What is it? How is it? Why is it?

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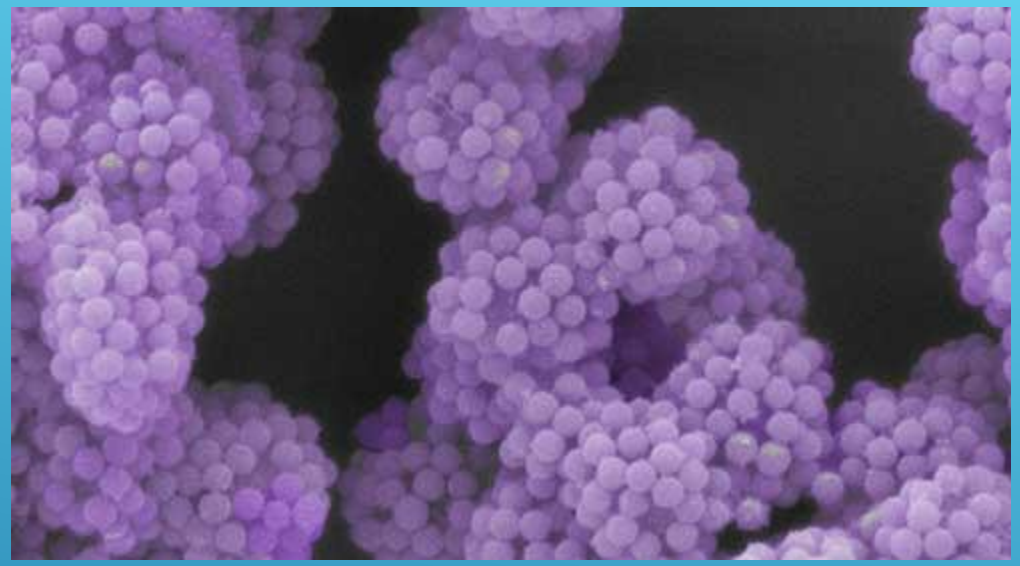
THE INTRODUCTION

- Nanoengineering is an interdisciplinary science that builds biochemical structures smaller than bacterium, which function like microscopic factories.



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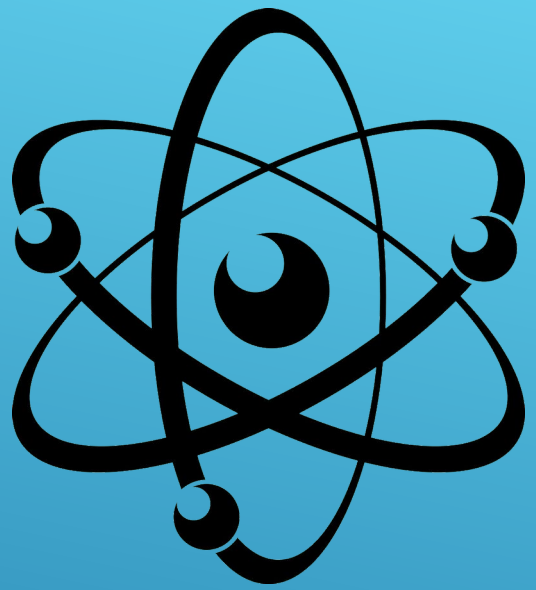
- First, nanomaterials have a *relatively larger surface area* when compared to the same mass of material produced in a larger form.
- Second, *quantum effects* can begin to dominate the behavior of matter at the nanoscale – particularly at the lower end – affecting the optical, electrical and magnetic behavior of materials.

THE FEATURES OF MATERIALS

THE VALUE

- The implications of being able to manipulate the “growth” of materials from the atomic level up are enormous. Nanoengineering could potentially lead to a plethora of revolutionary materials and products that would not only benefit areas like aerospace, medicine and technology, but everyday life.



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- One of the most exciting aspects of nanoengineering is that it is exceptionally cost-effective, environmentally friendly (raw product is abundant), non-polluting, and requires little energy.

THE VALUE

- It is widely believed nanotechnology will have a greater impact on the world than the Industrial Revolution and is predicted to be a multi-billion dollar business by 2021.

THE RESULTS

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THE SOURCES

- https://www.nanowerk.com/nanoengineering.php
- https://www.wisegeek.com/what-is-nanoengineering.htm

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