



# Innovations in the 21-st century

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# What is the modern world?

- The modern world that we live in is literally made up of the technological discoveries and the inventions done out by scientists and inventors. In the past the event that took hours to happen is done in minutes in the present times. This is basically due to the fact that in the 21-th century the manpower has been completely replaced by the machines in some areas. The dependency has decreased and efficiency has increased to a greater level. This is basically due to the inventions made in the initial part of the 21<sup>st</sup> century, namely the artificial intelligence and robotics, the development of nanotechnology, the success of the genetic engineering and so on. Let's consider some of the innovations that have changed the modern world.

# Artificial Intelligence

- Artificial intelligence is one of the most important innovations of the 21-st century. Scientists imbibe some intelligence into modern robots and get “smart machines”, which are able to get new knowledge, to estimate the situation and work out the best consequence of acts under the circumstances. The prospects of this technology is great. No doubt, it will have a great impact on all branches of modern science and technology.



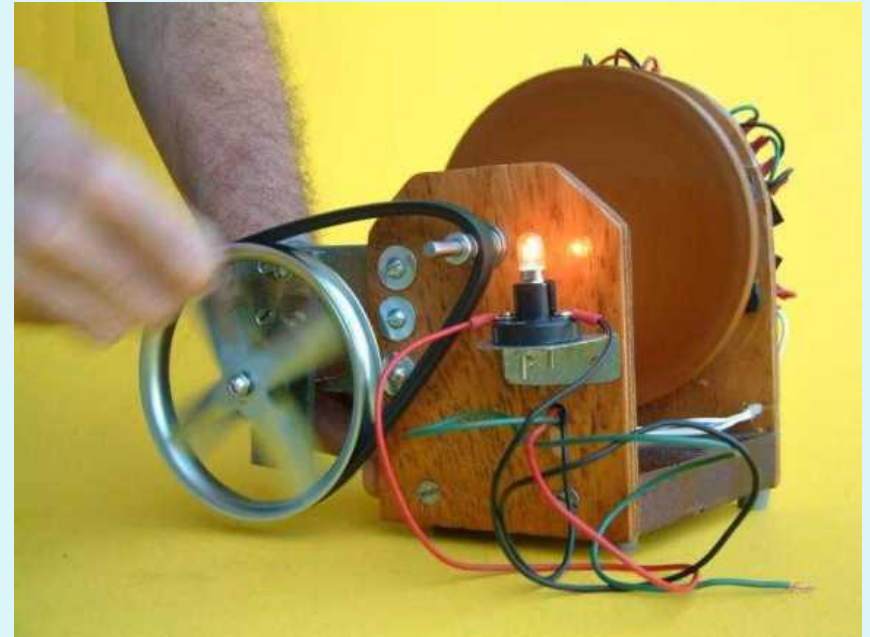
# Robotics

- Robotics is the branch of technology that deals with the design, construction, operation, and application of robots, as well as computer systems for their control, sensory feedback, and information processing.
- According to the very latest results in various experiments, it has been proved that robots can be efficiently used in order to do certain stuffs that were previously done by men. This can have a great impact in the military section of a country.



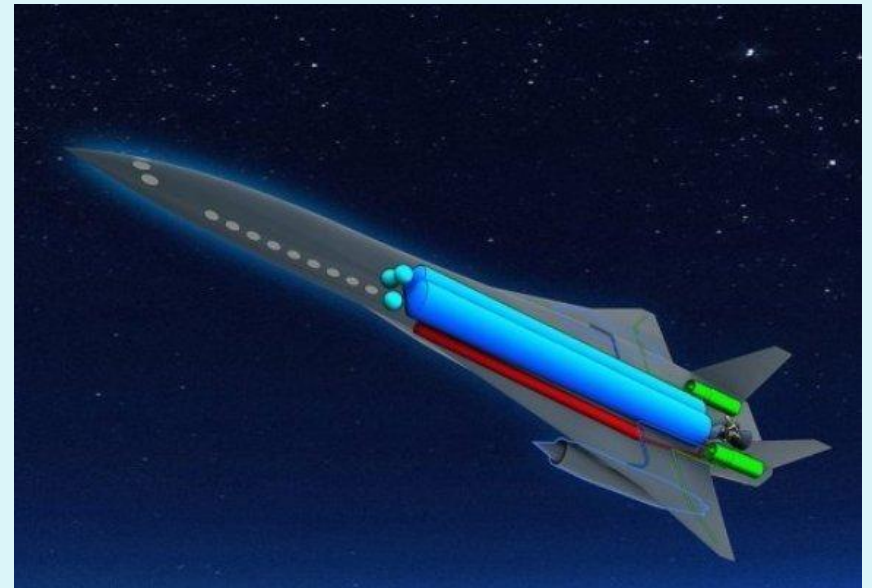
# FREE ENERGY

- Technologies such as **fusion** and **zero-point energy generators**, can provide an inexhaustible source of non-polluting, non-radioactive energy. At this time, however, both energy sources are considered fantasy technologies- but a century ago nuclear power was considered to be a fantasy too!!!



# Hypersonic transportation

- The way we travel by aircraft has completely changed in this century. This is more due to the fact that there has been a prime development in the area of Hypersonic transportation. Now you have planes and a train that travels very much equal to the speed of sound. With proper development of the technology we will seriously be able to travel all the countries of the world in just 80 days.





# The Hydrogen Powered Cars

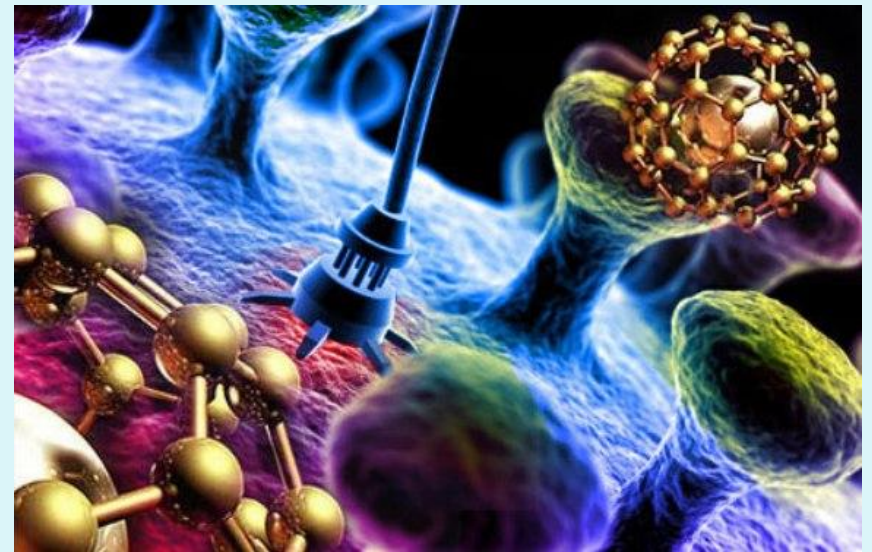
- A hydrogen vehicle is a vehicle that uses hydrogen as its onboard fuel for motive power. The engines of such vehicles convert the chemical energy of hydrogen to mechanical energy either by burning hydrogen in an internal combustion engine, or by reacting hydrogen with oxygen in a fuel cell to run electric motors.

Widespread use of hydrogen for fueling transportation is a key element of a proposed hydrogen economy.



# NANOTECHNOLOGY

- Nanotechnology is the manipulation of matter on an atomic, molecular, and supramolecular scale.
- This is the most fascinating advent in the field of technology. The subject deals with the extremely small microscopic particles which are so fine that they can be injected into the human body and repairs can be done to the human organs. The prospects are great.





# GENETIC ENGINEERING

- This is one of the greatest achievements of the scientists. We have not only been able to unlock the information in the gene of the animals, at the same time we also have merged the information and made new beings that are much better and stronger than their parents.



# Genetics and cloning

- Actually, cloning has been known since the twentieth century, so it's nothing really new. However, if we can clone a sheep, it should be possible to clone a human being, which is probably going to become a common-place reality. Of course, people won't necessarily make carbon copies of themselves just for fun, but as a means of replacing faulty organs and regenerating lost limbs. Lose a leg? Take a few cells from your body, grow a new one, and have it attached (probably by robotic doctors) in a few hours. Got a bad ticker? No, problem. You can grow a new one in a flask in a few weeks and then have the old one replaced.



# Mind-reading device

- "Mind-reading" is a term used in psychology and represents the subconscious detection and analysis of nonverbal cues, for example facial expressions and head movements. The mind-reading machine scans brain signals of the user and alerts them to the emotional state of the individual they are in a conversation with.
- It is worth mentioning that the device could be used to help people with autism improve the degree of learning the social cues of other people.



# CONCLUSIONS

- It goes without saying that the achievements of modern technologies are great, they are significantly changing our way of life.
- No doubt, that nowadays our strength is not only in our muscles. Our strength is in our knowledge and technologies, in our ability to solve the modern challenging problems.