



NANOTECHNOLOGY AND PERSPECTIVES OF ITS APPLICATION

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ABSTRACT

This paper presents an analysis of the fundamental networks of nanotechnology and the expected results from its development.

KEYWORDS: nanotechnology, nanoscale, new technology, promising industries.

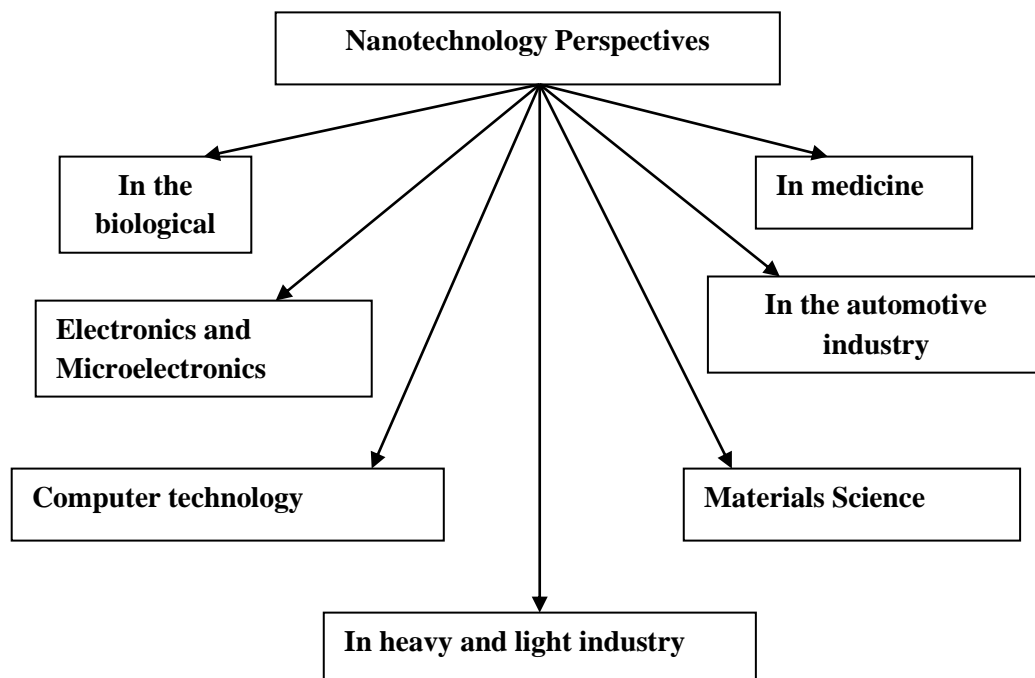
DISCUSSION

As we know, at the beginning of the 21st century a new direction in science has begun to appear in all spheres. Its founder was the famous American scientist R. Feynman, and, according to him, the sign "look down there is much space" signified the existence and inevitable development of

nanotechnology in the microfilm. In other words, the great future of the small world was foreseen.

Nanotechnology is one of the areas where science can be used to create and operate devices with a billionth of a meter in size, which can make a lot of progress for human science.

In this regard, we have recommended some of the areas where nanotechnology has been applied to the schematic table.



schematic table 1.



Advances in nanotechnology apply to all sectors of society. Therefore, nanotechnology is a leading technology of the 21st century. This sector is focused not only on the development of some industrial sectors or the market economy, but also on the development of a diversified sector and any industry.

These are:

- in the production of materials;
- in the field of health care;
- in electronics;
- in the field of state defense;
- in new technological processes;

It can be applied to all industries, including all spheres of social life. We cannot imagine all of this at the moment, but nanotechnology products are now entering our daily lives. We use it without even knowing how it was created.

Nanotechnology products are used in cars, personal computers, sports equipment and clothing, military equipment, heavy and light industries. This new nanotechnology industry is, in our opinion, the "strongest" science, but has the smallest size, and its devices play important functions in creating different objects and improving the service time and service quality. Take, for example, the tennis ball, which is covered with nanoscale, does not allow air to flow through it, increases its performance, increases its service life by 5 times and has the ability to jump. The tennis racket also uses technology to make it more efficient. This example can be used not only in tennis technology, but also in car paint. Nanotechnology-based paints help to protect vehicles from various scratches, depreciation and corrosion. For this reason, a large amount of funding is given to developing countries for the development and use of nanotechnology. In their view, the development of this industry is to create new opportunities for nanotechnology in the future. Over the last 20 years, nanotechnology research has shown that these advances have a significant impact on the economy, as nanotechnology is widely used in nanotechnology and technology. is used as a protective layer. This was done in the 2000s, when the funds used were recovered. In 2010, US vehicle savings were also significantly enhanced, including enhancing the vehicle lifespan by covering not only the car surface but also some parts with nanocomposite layers by covering the surface with anti-slip. In this regard, the economic benefits of both car manufacturing and mechanical engineering, as well as the use of nanotechnology from moving machine parts, have begun. It should be noted that the automotive industry produces catalytic converters using nanometers of small size. This is made by platinum particles, that is, nanometer-sized particles.

In addition, nanotechnology-based materials are widely used in the manufacture of solar cells with high efficiency. This means that nanotechnology also

creates new prospects in the solar energy system. In general, nanotechnology has produced unprecedented positive effects in all areas of manufacturing.

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