


***PLANT FOR THE PRODUCTION OF GRAPHENE
AND MATERIALS BASED ON IT***



The result of the implementation of this Project will be the creation of a Pure Graphene Plant. Raw materials - wastes from the woodworking, pulp and paper and agricultural industries (lignin sludge, bark, sawdust, straw and similar waste containing lignin). The process runs autonomously and leads to the formation of useful condensed products. There are no world analogues of this method of graphene production.

Advantages:

Cheapness (the prime cost of graphene is 100 Euro per 1 kg.); High purity of the product (graphene content not less than 95%);

High productivity (limited only by the size of the reactor), allows to obtain GnP / GnS 1 ton of graphene per month;

The synthesis process takes place in an autowave mode;

The main nomenclature items of manufactured products are graphene of the main

brands - GnP, GnS.

Battle for graphene

A technological race for leadership in the field of two-dimensional materials has begun in the world. Graphene has already found applications in real products, and graphene centers are opening around the world.

- In March 2015, the Chancellor of the British Treasury George Osborne officially opened the National Graphene Institute in Manchester, which was named The Home of Graphene.
- World renowned British billionaire businessman and philanthropist Richard Branson has made a policy statement on the need for a graphene revolution in aircraft construction.
- Singapore has become one of the leaders in the graphene race. Total investments in it have long exceeded \$ 1,300 million.
- The United Kingdom has entered the world competition for leadership in the technologies of the future, where three large research centers for working with graphene are concentrated at once.

This two-dimensional world holds such a promising technological future that no one wants to miss the moment when laboratory research turns into commercial products.

Problems of the global graphene market

Scientists in the journal "Advanced Materials" write:

“It is very disturbing that 90% of manufacturers call black dust graphene and sell for a lot of money, but in reality the material they sell is mostly cheap graphite. This behavior severely damages the reputation of the entire industry and has a negative impact on serious graphene developers and manufacturers.

The world market is filled not with graphene, but with finely dispersed graphite dust. It is impossible to obtain a unique product from such material.

99% of methods for producing graphene do not have methods of mass production and are produced only in laboratory facilities.

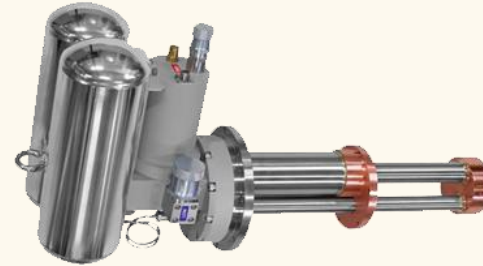
All the produced graphene has a very high cost price.

All these problems do not allow to implement graphene everywhere.

Applying

Absolutely all materials, with the inclusion of graphene in their base, acquire unique consumer properties.

cryocoolers for 5G base stations



Oil and lubricants for engines and mechanisms

textiles and clothing with special properties



Aviation and space
lightweight and super durable
materials



body armor

High-capacity batteries for smartphones,
drones and electric vehicles



Ultra-fast processors, sensors and chips

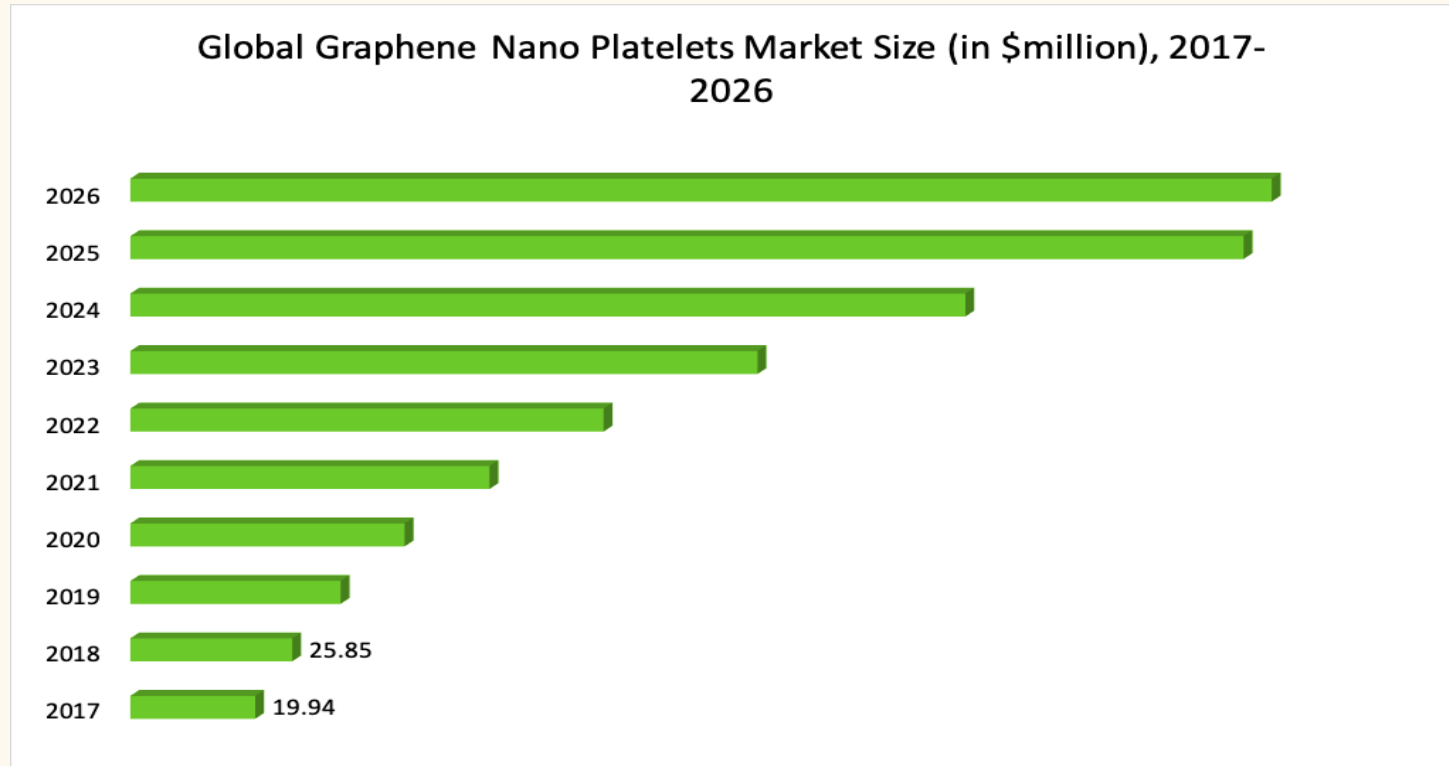
super efficient sterilizers against germs and viruses



High strength cement, paints, sorbents, medicines, heat-conducting and heat-insulating materials and much more

Product demand

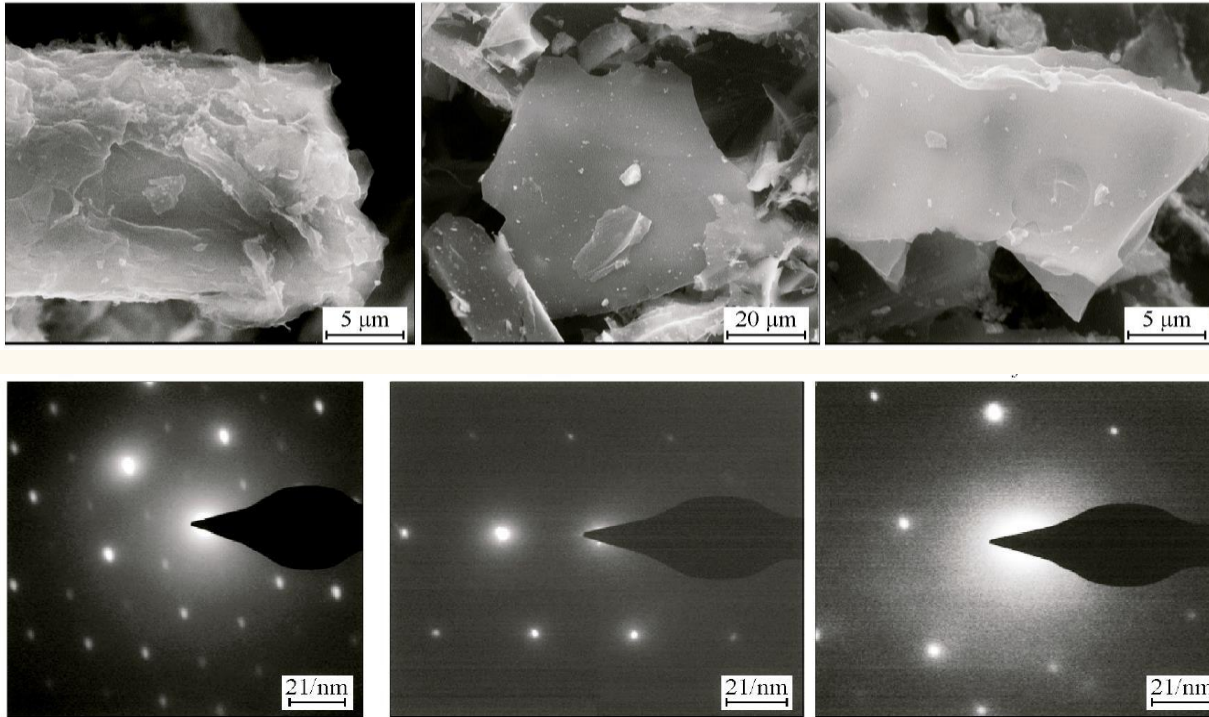
The world graphene market is estimated at more than 200 billion USD



Large private companies are showing great interest in the production and research in the field of graphene. For example, Samsung (Korea), IBM (USA), SanDisk (USA), Foxconn (Taiwan), Fujitsu (Japan), Lockheed Martin (USA), as well as state-owned companies.

Properties of our graphene GnP

Images obtained with an electron microscope. Graphene synthesis
from cellulose from glucose from lignin



- all samples have a distinct low-layer, hexagonal structure typical of GnP and other graphene materials;
- interplanar distances are 3.85Å, 3.74Å, 3.75Å, respectively;
- the number of layers in structures does not exceed 5;
- specific surface area GnP- Cellulose 620 m²/g, - Glucose 436 m²/g, - Lignin 525 m²/g

Investor information

Necessary funds for the creation of production - 8,5 million euros

For the production of graphene, at the Enterprise, synthesis reactors will be manufactured, assembled and installed. The plant will create its own research and testing laboratory and pilot sites for the development of various application technologies.

Characteristics and composition of the main equipment :

- synthesis reactor;
 - treatment lines (raw material preparation lines);
 - air purification and aspiration equipment;
 - sewage treatment line;
 - disposal of residual components;
 - laboratory equipment
 - loading and storage equipment;
 - packing area;
 - raw material storage area.
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- Average proceeds from product sales - 24,000,000 Euro per year.
 - Average gross profit - 22,000,000 Euro per year.
 - The planned payback period of the Project is 1 year from the moment the Plant reaches full capacity.
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- We offer shares in the Company - ___% to investor, ___% to the initiator of the Project, return on invested funds within 5 years and an investment premium after exiting the Project.