

Nanomaterials LLC

Volume of investments required: \$ 15 000 thousand

Use of funds

R&D - 5%

Marketing - 2%

Acquisition of current assets - 18%

Acquisition of fixed assets - 70%

Other (Patent-legal defense) - 5%

Company profile

1. Date of establishment – May, 2005.
2. Size and source of investment to date – \$ 25 000 – the program “Start” of the Foundation for Assistance to Small Innovative Enterprises.
3. Production – nanotechnology and technology of special materials.
4. Target market – war industry, oil-refinery industry, polygraphic industry, chemical industry (catalysts, plastics, sorbents).
5. Sales 2004 – none.
6. Description and value of assets – computers and orgtechnique.
7. Goodwill and intellectual property rights – 2 patents. The intellectual property belongs to the main founder of the Company who by agreement gives it over to the Company.
8. Signs of public recognition – the founders are the authors of more than 800 printed works, papers, diplomas, state rewards for their achievements in the field of science and technique.

Owners

Individuals	90%, 10%
Share of government property	0%

Products characteristics

The technology of producing of nanodispersing carbonic materials. As initial material natural gas was taken. This gives a possibility to use accompanying gases of oil-extraction industry which at present are burnt with great ecological damage. This technology is successfully tried at laboratorial, model and pilot plants. At present a semi-industrial plant is constructed by Special Constructor-Technical Bureau “Technologist”. Based on this technology we plan to create mobile modules for processing of natural gas which will permit to produce the most valuable nanodispersing carbonic powders from natural resources of our Homeland which are being wastefully destructed at present.

Nanoactive carbon. The product is a monodispersing powder with grain dimensions 3–5 nm. It has large specific surface – of more than 1000 m²/gramm, that is several times as large than the nearest analog. The powder is produced by way of directed flaming synthesis which is the basis of the proposed technology. It differs from other known nanocarbonic products by great physical and chemical homogeneity as it consists from equal-sized particles and includes no admixtures. The product is exceptionally suitable for utilization in the field of nanotechnologies. Thanks to its great surface activity the powder is easily modifiable by any functional groups which greatly widens the possibilities of its use.

Markets & Competition

Our product can be used for production of special ceramics as a carrier for sorbents and catalysts production of composition materials production of special rubber for tires, used in extreme conditions production of varnishes and paints of high quality.

Data		Nanocarbon	Nanodiamand	Fullerens
Geography – Worldwide market. Market size – \$ 150 million				
2004	Share at the market, \$ ths / %	-	\$ 50 000 / 33%	1000 / 67%
Geography – Worldwide market. Market size – \$ 400 million				
2009	Share at the	3 000 / 0.2%	70 000 / 46.6%	200 / 53.2%

	market, \$ ths / %			
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Marketing & Sales

- Marketing research of possible companies – consumers of nanocarbon (2005–2006);
- Publications of corresponding patents (2005–2006);
- Advertising of the product and means of production by Internet, in print editions orientated at high technologies, distribution of requests to producing companies and possible consumers of nanocarbonic products (2005–2006);
- Publication of research results in leading magazines of RF (Reports of the Russian Academy of Sciences, The General Chemistry Journal, The Applied Chemistry Journal etc.) and abroad (Carbon etc.) (2004–2006);
- Participation in thematic and international exhibitions, conferences, congresses and seminars (2004–2006).

Prospects of development

Creation of a semi-industrial, later industrial plant for producing of nanocarbon, organization of one-shift work (2005);
Creation of an industrial complex (a shop) for producing nanocarbon, organization of continuous production (2006).