An R&D center for composite materials will be opened at Skolkovo

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As part of the 4th International Nanotechnology Forum, the Skolkovo fund and the Composite Holding Company signed an agreement to organize an R&D center for carbon fiber based polymer composite materials which will be located at Skolkovo. The document was signed by Viktor Vekselberg, president of the Skolkovo Fund and Leonid Melamed, president of the Composite Holding Company in the presence of Sergei Kirenko head of Rosatom State Corporation and RUSNANO chairman of the board Anatoly Chubais.

The signed agreement established primary target parameters up to 2015 for the R&D composite materials center which will become part of Skolkovo Innovation Center. The new center will employ 25 people, including 2 foreign specialists.

The total investment planned for the R&D center until 2014 will be around 600 million rubles, including 300 million that Composite Holding Company plans to attract from the Skolkovo fund. The annual budget of the R&D center, will be approximately 200 million rubles starting from 2015.

The Composite research and development center (hereafter Composite RDC) will conduct research as part of Skolkovo’s nuclear technology program supported by the Skolkovo Fund. The primary mission of the R&D center is to conduct research aimed at perfecting carbon fiber production technologies. This research will be focused on development of new methods for production of polyacrylonitrile precursors and carbon fibers, and on creation of new products made of high-test polymer composite materials. The main goal is to substantially raise the quality of Russian-manufactured carbon fiber and provide lower prices for such material. Carbon fiber is extremely light, durable, and highly weather- light and penetrating radiation resistant. These fibers are used to reinforce composite, insulation, chemo resistant and other types of materials and as addition to various carbon plastics.

“In our program of polymer composites usage in the atomic industry products, which makes projections up to 2020, we have a separate section dedicated to scientific research in this field. We are prepared to test solutions which will be brought out by this R&D center at our production facilities, and successful ideas can be applied not only at our own facilities, but also in other branches of atomic industry.” Sergey Kirienko said.

Viktor Vekselberg noted: “It is gratifying, that more and more Russian companies are showing interest in finding practical forms of cooperation with the Skolkovo fund. We are already supporting creation of research structure at Skolkovo for such Russian companies as Sberbank, Information Satellite Systems named after academic Reshetnyov, and Rocket
and Space Corporation “Energiya”. Working with the Composite company will make it possible to support development of Russian skills and technology in the field of composite polymer materials, which, in many ways, is significantly less developed in Russia than in the leading countries. Scientific research dedicated to perfecting technologies for the production of carbon fiber is of extreme importance; after all, this is a unique material, the material of the future. Its characteristics have tremendous potential for use in various branches of industry, which makes it possible to truly consider it as one of the materials of the 21st century. This R&D center is created in order to significantly raise the quality of Russian-manufactured carbon fiber, and reach the level of skill and technological development that exists in the rest of the world.”

“Until quite recently, corporate science in the field of polymer composite materials based on carbon fiber in Russia existed on an isolated basis. Using this composite materials R&D center, we plan to bring pure science, universities and business together. Our goal is to organize the process in a way, that science will solve problems important to business.” said Leonid Melamed.

Information

The Skolkovo Fund

The development fund for the Skolkovo center for the development and commercialization of new technologies is a non-profit organization, created by an initiative of the president of the Russian Federation, Dmitry Medvedev, in September of 2010. The Fund's mission is to mobilize Russia's resources in the field of modern applied research, the creation of an encouraging environment for new developments in five significant fields of science and technology: energy and energy efficiency, space, biomedicine, nuclear and computer technology. This project involves the creation of the Skolkovo institute of Science and Technology (SIST), research institutes, a business-incubator, a center for the exchange of technology and commercialization, representative offices of foreign companies and R&D centers, living facilities and social infrastructure, as well as establishing an effective system for the distribution of Russia's investment resources. The activities of the Skolkovo innovation center are regulated by a special law, which guarantees special economic conditions to its residents. www.i-gorod.com

The Composite Holding Company was created in order to form a market for composite materials in Russia in 2009. This vertically integrated holding company includes enterprises involved in producing highly durable and highly modular carbon fibers (JSC Argon, LLC Composite-Volokno, LLC ZUKM), fabrics based on those fibers and high quality prepregs (CJSC Prepreg-SKM), which are used in the aviation industry, construction, the automotive industry, shipbuilding, etc. Among the Holding’s tasks are the creation of highly efficient, environmentally friendly production of carbon fiber and carbon fiber products on the basis of innovative technologies for the production of continuous and discrete fibers. The Composite Holding Company plans to occupy a leading position in the engineering, production and sale of next-generation composite materials and satisfy the demands of the aforementioned industries for domestically made next generation composite materials.

The RUSNANOTECH forum is a place to discuss and demonstrate innovate technology in machine building and metal processing, optical electronics and nanoelectronics, solar energy and energy efficiency, medicine and biotechnology, the new branch of industry devoted to producing nanopatterned materials, and infrastructure projects. The Forum’s mission is to give participants an opportunity to discuss the primary tendencies of global scientific and technical development and key trends in the investment process in the hi-tech sphere, and encourage the practical commercialization of new projects inside Russia:

- present concepts to potential investors and partners
select promising investment opportunities
find suppliers of innovative products
create a network for the completion of projects
establish new contacts on various levels

The international nanotechnology prize, RUSNANOPRIZE, is proudly awarded at the Forum. The Forum program includes an award ceremony for recipients of the Russian youth nanotechnology prize and the winners of the international scientific papers contest for young scientists working in the field of nanotechnology. RUSNANOTECH 2010 brought together more than 10 thousand participants from 50 countries. During the Business and Science and Technology programs of the Forum, more than 400 presenters spoke. These speakers include Nobel Prize winners Academic Zhores Alferov, Professor Konstantin Novoselov, provost of the Massachusetts Institute of Technology Rafael Reif, and General Director of Microsoft Steve Ballmer. The plenary session of the Forum was opened by the president of the Russian Federation, Dmitry Medvedev. Hundreds of Russian and foreign companies have presented their designs at the Forum’s exhibition. More detailed information about the RUSNANOTECH 2011 forum is available on the website: www.rusnanoforum.ru