

## Geography of new markets expands

### Minsk Automobile Works to supply Equatorial Guinea

The supply agreement was reached during negotiations with the Deputy Defence Minister of Equatorial Guinea, held at the MAZ premises. Sixty pieces of vehicle equipment are to be shipped to the Central African country in autumn, following the signing of a detailed contract.



MAZ automobile

The enterprise has recently received various foreign visitors interested in Belarusian automobile technology, including groups from African and Latin American countries. A delegation from Slovakia has also discussed its interest in liaising with our automobile and machine building organisations.

In 2013, BelavtoMAZ Holding plans to explore the new sales markets of Bangladesh, Ecuador, Mozambique, Guinea, Nigeria, Kuwait and Saudi Arabia. Moreover, new MAZ assembly factories are to open in Azerbaijan, Russia, Ukraine, Vietnam, Iran and Europe. MAZ is working to expand its commodity distribution network across 14 Russian regions.

## Gold reserve growing

### National Bank of Belarus reports on country's gold and currency reserves

Attention has been given recently to Belarus' reserves in gold and currency, since this year is expected to prove expensive for the economy; the state needs to repay its debt obligations to foreign creditors and it's unsure how this may influence the state 'pocket'. So far, the country has managed to escape losses. In April, gold and currency reserves rose by \$106m and, as of May 1st, were worth \$8,259.9m (calculated by International Monetary Fund standards). Using national standards, reserves rose by \$63.3m, to reach \$9,283.6m. According to the National Bank's Information and Public Relations Department, the next tranche of the EurAsEC Anti-Crisis Fund loan — worth \$440m — has promoted the rise.

However, there may be clouds on the horizon as international gold prices dropped significantly last month, reducing the value of our reserves, despite Belarus raising its volume. Meanwhile, the state must fulfil its financial obligations. According to specialists, the National Bank and the Government have completely fulfilled all external and internal obligations in foreign currency to date.

# Preparing one's luggage

## Belarus to 'jump' on board of accelerating 'nano-train'

By Tatiana Kovalevich

Nano-technologies are the science of the future, although some are sceptical as to whether their industrial application will reach fruition any time soon. Various countries are already investing heavily, hoping to keep at the cutting edge of innovation, taking advantage of emerging trends. Without doubt, Belarus could take its place among those leading the way.

Technology is about to leap forward, with a 'window' of opportunity opening before us, enabling us to make a sharp jump. The last time that this happened, Japan, South Korea, Singapore and Taiwan became industrial leaders within a few decades, without any prior indication. Research convincingly proves that nano-technologies will be at the heart of the next technological cycle.

The Deputy Chairman of the Presidium of the National Academy of Sciences of Belarus, Sergey Chizhik, notes, "It's a sensible move, since our entire world is built on the 'nano-' principle — from top to bottom, from atoms to molecules. The arrival of spring sees green leaves appearing 'from nothing'; new technologies appear in a similar fashion, when previously

successful branches begin to exhaust their potential. Traditional manufacturing relies on non-renewable resources: energy and materials. Belarus boasts good intellectual potential so we should be paying attention to creating high value added products, where each kilogram is valued at dozens of thousands of dollars." He mentions the precision instruments industry and pharmaceuticals, as well as the nano-industry.

The state is creating suitable sterile environments, with vibration reduction protection, to allow nano-technologies to be explored. Naturally, highly-precise instruments are needed to measure nano-particles. These primary investigations are vital, so that

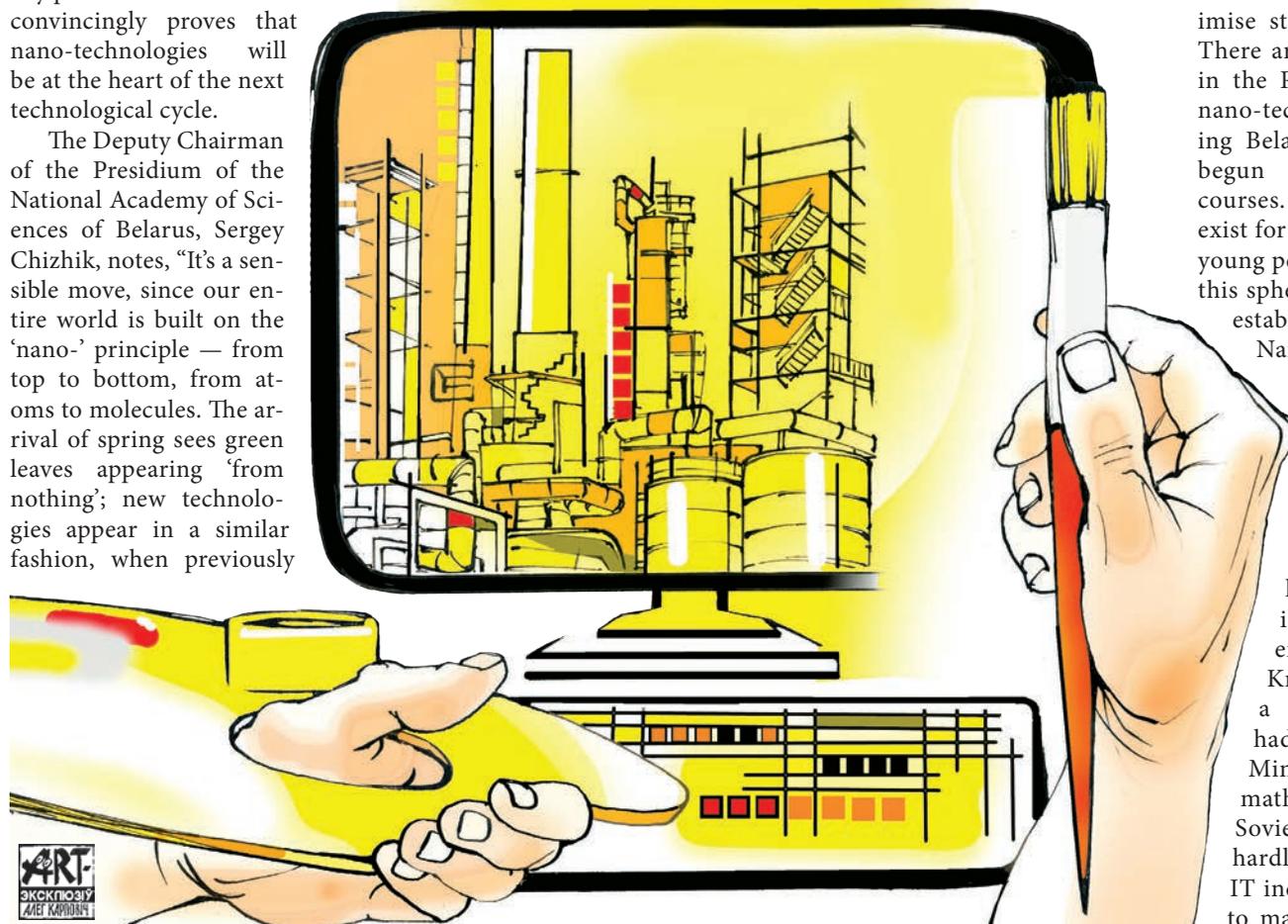
Belarus can find its niche in this emerging sphere. Ultimate breakthroughs are yet to occur, making this a truly exciting time for science. Pleasingly, in 2011, around \$15m was generated from this infant industry: a small but notable foothold.

In fact, 27 new developments have commercial potential. "These enable us to say that we can shape this industry. I'd like to underline that I'm referring to the industry rather than science," notes the Head of the Economic Ministry's Science and Innovation Policy Department, Dmitry Krupsky. The opening of the fullerene molecule in the early 1980s was the first signal for the development of the new branch. Since then, around 1,500 related compa-

nies have been set up worldwide, primarily in the USA. According to Mr. Krupsky, another 5-7 years will pass before we see the new industry really start to assert itself in the same way as computers, the Internet and IT software.

Mr. Chizhik adds that nano-technology is already finding application, such as in microcircuits, uniting computer technology within mobile phones. In addition, pharmaceutical enterprises are developing medicines with nano-particles, which can target problems specifically. Nano-technologies have application in farming, such as the processing of seeds to increase crop yield. Undoubtedly, some areas will make more use of nano-innovations than others.

Training is underway to maximise staff potential in Belarus. There are already 870 specialists in the Republic connected with nano-technologies and leading Belarusian universities have begun teaching corresponding courses. Of course, jobs do not yet exist for such graduates but 1,650 young people will have studied in this sphere by 2017. The recently established Association of the Nano-Industry could connect universities and industry and, of course, a 'stock' of potential employees is needed. "Practice shows that the more people we have boasting a particular speciality, the wider is the range of potential entrepreneurs," notes Mr. Krupsky. For example, if a radio-technical institute hadn't been established in Minsk — one of the five mathematical centres in the Soviet Union — we would hardly have such a developed IT industry today. It's difficult to make progress from empty space.



Modern nano-technologies help to enhance competitiveness of economy

## Belkommunmash appeals to Swiss

### European Bank for Reconstruction and Development to finance production of electric passenger transport in Belarus

The investment project foresees a private company being set up at Belkommunmash (a state enterprise manufacturing trams and trolley buses), managed by Swiss strategic investor Stadler Rail AG. The European Bank for Reconstruction and Development has already allocated a 14.5m Euro loan for a period of up to ten years for the joint venture between the Swiss company and the Minsk City Executive Committee.

The new company is using Belkommunmash assets and Stadler private capital, using contemporary technologies and existing experience of production of trams, trolley buses and passenger trains. The joint company plans to export almost all its output, making rolling stock for urban, suburban



Swiss electric trains to be produced in Belarus

and inter-regional public electric transport.

According to the EBRD Man-

aging Director for Infrastructure, Thomas Maier, this is the first case of a Western investor in-

jecting money into building and operating a contemporary enterprise manufacturing rolling stock in Belarus. Stadler hopes to gain a foothold on the CIS market, as well as selling rolling stock for broad-gauge railways in northern Europe. Meanwhile, Belarus' Belkommunmash will gain expanded export opportunities for its goods.

Funds allocated by the EBRD are being used to build a contemporary plant producing suburban and inter-regional passenger trains and trams at a new site at Fanipol Free Economic Zone, in the Minsk Region's Dzerzhinsk District. Moreover, the existing trolley bus plant at Belkommunmash in Minsk will be re-equipped to meet Stadler standards.