ISRAEL HIGH TECH & INVESTMENT REPORT

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Electric Car Project Launched!



At the end of January , the Israeli government announced its support of an ambitious plan, to install the world's first electric car network in Israel by 2011. The initiative is aimed at addressing global dependence on foreign oil from undemocratic regimes, and mitigating the health and environmental damages caused by emissions from gas-burning vehicles.

An electric car automobile won't solve all the world's problems, but it can help reduce CO2 emissions and dependence on fossil fuels, including foreign oil sources.

Electric cars have a number of advantages, that you should consider, if you are debating between a regular automobile and an electric car. The obvious first advantage is that electric cars are better for the environment than gas fueled cars. You will be releasing few emissions into the air.

Electric cars are very efficient. Unlike regular fuel powered cars that need extra power to run at slower speeds, or to take off from a dead stop, electric cars are at full-rated power, regardless of the speed that you are going. The cars generally do not need transmissions and even if they do have one, it operates very efficiently. "Today is a new age with new dangers and the greatest is that of oil. It is the major polluter of our age, and oil is the greatest financier of terror," said Israeli President Shimon Peres.

The venture, Project Better Place, owned by Israeli-American entrepreneur Shai Agassi, will provide lithium-ion batteries and the



Electric Car Project Launched Israeli-Chinese VC fund nets \$350 million 2007 Summary of Israeli high-tech company capital raising Sol-Gel Signs \$24.7m deal for dermatology drug delivery Bioness buys NESS for \$75m. IDF develops tiny bulldozer for combat inside cities Tel Aviv Stock Exchange, TASE summarizes its activity for 2007 Babylon signs largest contract in its history Seven Technion scientists among most promising European researchers Firm to detect bulk explosives Ness Technologies wins Prague digital map project Israeli firms raise record capital in 2007 offerings Taiwan and Israel to cooperate on info technology and biotech IDE to build desalination plant in Australia IBM buys another data storage company Israeli company BrainsGate wins Red Herring 100 Europe Award Oral anti diabetic substance discovered Gilat in Mexican broadband deal New Technique Helps Blind to see Israel unveils missile designed to intercept Hezbollah rockets Teva Pharma to buy CoGenesys for \$400m.

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infrastructure to refresh or replace them. Renault and Nissan will build the cars, with the goal of making Israel a laboratory test for a new model of environmentally efficient transportation. Israel will offer tax incentives to purchasers.

The innovative concept, developed by Agassi, would provide consumers with inexpensive cars, and they would pay a monthly fee for expected mileage, like minutes on a cell phone plan. Project Better Place will provide infrastructure, including parking meterlike plugs on city streets or service stations along highways, at which batteries can be replaced.

Renault Nisan, a partner to the project, will offer a small number of electric models of existing vehicles, like the Megane sedan, at prices roughly comparable to gasoline models. The batteries will come from Mr. Agassi. The tax breaks for "clean" electric vehicles, which Israel promises to keep until at least 2015, will make the cars cheaper to consumers than gasoline-engine cars. "You'll be able to get a nice, high-end car, at a price roughly half that of the gasoline model today," Mr. Agassi said.

Idan Ofer, chairman of Tel Aviv-based industrials conglomerate Israel Corp., provided the initiative and half of its \$200 million funding. Building on the idea of Israel, as an experimental laboratory for environmental technology, Ofer has begun targeting China and India, the two countries with burgeoning oil consumption and attendant environmental hazards.

Ofer said that if Agassi's plan works in Israel, "it will work even better in China. Their pollution is killing them and the rest of us, too." And in Mumbai, he said, "you can't even see the sky."

Israel has been on the forefront of developing alternative energy technology, and is a significant center for its energy research and development. More than 200 Israeli firms have so far developed environmental or energy-related technology.

Israeli companies have been working to provide alternative energy in the United States for decades. From 1984 to 1991, Israeli technology, built nine solar plants in southern California. The plants are still operational today, eliminating the need for nearly 2 million barrels of oil each year, and providing electricity to millions of Americans. Today, an American and Israeli company, are working together in Nevada to build the largest solar power plant since 1992.

Europe has already begun working with Israel on alternative energy research. In June 9, 2007, German Environment Minister Sigmar Gabriel, pledged nearly \$2.2 million from his ministry, to four separate German-Israeli alternative energy projects.

James D. Wolfensohn, the former World Bank president, is a modest investor in the project and said that: "Israel is a perfect test tube" for the electric car, Wolfensohn said. "The beauty of this is, that you have a real place where you can get real human reactions,. In Israel they can control the externalities and give it a chance to flourish or fail. It needs to be tested, and Agassi is to be commended for testing it and the Israeli government for trying it out."

Israeli-Chinese VC fund nets \$350 million



The China Development Bank and IDB Group, Tel-Aviv, Israel have invested \$50 million in the Infinity I-China Fund. The I-China Fund is set to be managed by Infinity-CSVC Partners Ltd., a general partner with a joint management team both from

Infinity and Suzhou Ventures Group. The fund has

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served as an initial bridge between Israel and China and as such, has created growing enthusiasm. In May 2007 we had a first closing of \$155 million. With the new investment we now have closed \$270 million with a new target of \$350 million by July 2008. \$50 million of the \$270 million is from an onshore RMB, led by Suzhou Ventures Group," said Infinity Equity managing partner Amir Gal-Or. The Infinity I-China Fund, invests in late-stage Israeli technology companies with parallel investments in Chinese businesses, that license Israeli technologies to develop and market them in China. The investment focus is aligned with the current Chinese government strategy, which is meant to transform China from a labor intensive, mass manufacturing focused nation, to an innovation and service focused economy.

2007 Summary of Israeli high-tech company capital raising



In 2007, 462 Israeli high-tech companies raised \$1.76 billion from local and foreign venture investors, 8.5 percent above the \$1.62 billion raised in 2006 and 31.5 percent above 2005 levels.

In the fourth quarter, 115 Israeli high-tech companies raised \$503 million, a 21 percent increase from the \$414 million raised by 108 companies in the third quarter and a 5 percent increase from Q4 2006. Capital raising in the fourth quarter - the highest in five years - included an especially large financing round of over \$100 million for MobilEye. Even after adjustment, the figures indicate a stable level of capital raised relative to 2006.

"Both investments and exits in 2008 will be dependent, to a large extent, on economic activity in the US," said Zeev Holtzman, Chairman of IVC Research Center and Giza Venture Capital.

"A possible crisis on NASDAQ would mean fewer IPOs and lower acquisition values, which would impact the high-tech industry in Israel. Yet, we expect that the \$1.6 billion average investment level of the last few years will be maintained in 2008."

In Q4 2007, the average company financing round was \$4.37 million, compared with \$3.8 million in the previous quarter and \$4.5 million in the fourth quarter of 2006.

Israeli VC investment activity

In 2007, Israeli VCs invested \$678 million in Israeli high-tech companies. The Israeli VC share of the total amount invested in Israeli hightech companies was 39 percent as compared to \$651 million or 40 percent in 2006 and \$655 million or 49 percent in 2005.

In the fourth quarter, Israeli VCs invested \$142 million, which accounted for a low 28 percent share of the total invested in Israeli high-tech companies (35 percent excluding the \$100 million MobilEye round). The remainder came from other investment entities, mostly foreign. The Israeli VC investment share was also substantially below the 42 percent average of the previous nine years.

First investments made by Israeli VCs were 43 per cent of the total amount invested by Israeli VCs in 2007, equal to 2006 levels. The average First and Follow-on investments were \$2.48 million and \$0.89 million, respectively.

In the fourth quarter First investments made by Israeli VCs accounted for 33 percent of their investments, compared to 51 percent in the third quarter and 55 percent in the fourth quarter of 2006.

Israeli VC activity ini foreign companies

Israeli VCs invested \$50 million in foreign companies during 2007 (in addition to their investments in Israeli high-tech companies), compared to \$60 million in 2006 and \$95 million in 2005. Three of the 39 investments were First investments and the remainders were Followons.

Capital raised by sector

In 2007, the Cosunications sector led capital raising with \$371 million or 21 percent of total capital raised, followed by the Life Sciences with \$351 million or 20 percent. Semiconductors garnered 19 percent of total investments in 2007 and 31 percent in the fourth quarter. The figures reflected, in part, MobilEye's \$100 million round. The Internet sector, with \$257 million raised, has markedly increased its share of investment, which reached 15 percent in 2007. This compares with figures ranging from

2 to 5 percent in the last 5 years.

Capital raised by Ssage

In 2007, 78 Seed companies attracted \$151 million, the highest amount raised since 2001. At 8 percent, the share attracted by Seed companies remained consistent with that of the previous four years.

In the fourth quarter, Seed companies attracted only 4 percent, compared with 7 percent in the previous quarter and 11 percent in the fourth quarter of 2006. Late Stage companies captured \$180 million or 36 percent of the total capital raised. This relatively high share was as a result of the \$100 million MobilEye round.

Sol-Gel Signs \$24.7m deal for dermatology drug delivery

Sol-Gel Technologies Ltd. has announced that it has entered into a development and licensing agreement with a leading U.S. pharmaceutical company for the development and commercialization of a major dermatologic product.

Under the terms of the agreement, Sol-Gel Technologies will receive \$24.7 million, comprised of an initial nonrefundable payment as well as additional payments upon the successful completion of various milestones. The U.S. partner will fund the product's development. Sol-Gel will be entitled to receive royalties from net sales.

"This collaboration is further confirmation of the value of Sol-Gel's unique technology and an important step in our goal of becoming a leading provider of advanced encapsulated solutions and controlled drug-delivery for the pharmaceutical industry." said Dr. Alon Seri-Levy, co-founder and CEO.

"As Sol-Gel has retained the right to market this product outside of North America, we look forward to marketing it together with additional partners in the rest of the world," said Daniela Mavor, Senior VP for Business Development.

Bioness buys NESS for \$75m.



Bioness Inc. (Santa Clara, Calif.) has completed the acquisition of Neuromuscular Electrical Stimulation Systems Ltd. (Ra'anana, Israel) for \$75 million. Bioness, which has an R&D center in Israel, was established in 2004 by the Alfred E. Mann Foundation for Scientific Research.

Neuromuscular Electrical Stimulation Systems (NESS) utilized neuromuscular electrical stimulation to develop equipment and systems to activate paralyzed muscles. The company is committed to providing technological solutions to respond to the needs of the millions of patients suffering from paralysis due to neurological disorders.

Incorporated in 1991, NESS is a private company that utilized the technology of surface neuromuscular electrical stimulation to develop solutions for activating paralyzed muscles.

NESS' shareholders that include Teuza, an Israeli public venture capital fund associated with US-based Fairchild Group, The company's first product was the NESS H200 Handmaster — a non-invasive system for treating paralyzed hands. The NESS L300 is a device for gait rehabilitation and treatment of drop foot.

IDF develops tiny bulldozer for combat inside cities



The Israel D e f e n s e Forces have developed a tiny bulldozer for combat operations i n s i d e

Palestinian cities, a military publication reported.

The little machine is designed for rumbling down narrow roads and paths in the closer quarters of Palestinian cities, where old sections are warrens of crowded alleyways between rundown concrete block buildings. In previous operations, IDF forces have sent full-size bulldozers ahead of ground troops, causing considerable damage to buildings.

The current edition of the soldiers' weekly Bamahaneh carries a picture of the new machine, called Lioness. It looks like a toy - a vehicle higher than it is wide or long, painted olive drab, with small wheels, and a black shovel attached to the front. It has room for one person behind heavily reinforced and protected windows.

The description of the innocuous-looking machine

takes it far out of the toy category.

The main innovation, besides its small size, is a firing post for the driver, the article said. The driver can fire in all directions, staving off attacks and destroying targets, the article said. Ordinary bulldozers to not allow the driver to open fire.

The little vehicle, running in front of the troops, can clear away obstacles like piles of garbage and improvised blockades of rocks and other materials, the article said.

The article quoted Col. Amir Kochavi of the IDF ground forces engineering section, said the new bulldozer was developed because "there are different combat requirements to those we faced before, mostly because of the need to carry out engineering tasks in crowded, built-up areas."

EER to set up plasma recycling plant in Romania

Environmental Energy Resources Ltd. will set up Romania's first plasma waste treatment facility under a 25-year BOT (build, operate, transfer) project.

Israeli and Russian scientists at the Technion Israel Institute of Technology developed the system. Unsorted municipal and solid waste is placed in a reactor. Metal particles are separated by magnets and the remaining waste is sent containers where it is broken down by high heat.

The organic material is converted into gases, and the remaining waste turns into black gravel that can be used in infrastructure projects. The system can also handle medical and radioactive waste, thereby providing a waste treatment solution for nuclear power stations.

EER's shareholders include Urdan Industries Ltd. (TASE: URDN), Shrem Fudim Technologies Ltd. (TASE:SFKT), Makoto Takahashi's Tokyo Financial Group, the Canada-Israel Opportunity Fund, Leon Recanati, and Shlomo Nehama.

Babylon signs largest contract in its history

The online dictionary firm will provide licenses and services to a world energy giant.

Online dictionary company Babylon Ltd. (TASE:BBYL) has signed a NIS 9.1 million follow-on contract with Petroleo Brasileiro SA (Petrolbras) (NYSE:BPR;

Bovespa: PETR) to provide licenses and support services. Babylon has already received orders worth NIS 6 million under the contract. Petrolbras is Brazil's largest energy company and the eighth largest public energy company in the world.

In 2006, Petrolbras first bought licenses from Babylon, as well as a range of solutions, including dictionaries, multilingual glossaries, and solutions for mobile telephones.

Seven Technion scientists among most promising European researchers

Golden Globe Award 7 young scientists from Israel's Technion appear on the European Union's list of 300 promising scientists. They will receive grants averaging 1 million Euros per researcher. Technion Executive Vice President for Research, Prof. Moshe Eizenberg, said that the Technion had 49 candidates. There were 9,300 candidates in all competing for these grants.

Among the top 200 winners, there are four Technion researchers – Dr. Aharon Blank, Dr. Debbie Lindell, Dr. Eldar Fischer and Dr. Shahar Mendelson.

Firm to detect bulk explosives

A new Israeli company is developing a system to cut the number of airport security false alarms and identify bulk explosives in luggage, the chief executive stated.

"The problem with existing systems is that (the number of false alarms) can reach 40 percent in some places," Ze'ev Harel, the chief executive officer of Xurity, was quoted in UPI in a telephone interview. He added that, for example, on flights where people tend to bring food products in their baggage, such as flights to and from India or within the United States around Thanksgiving, the food is often mistaken for explosive material by existing security systems and the human inspectors.

Xurity plans to offer a device that will complement the scanning devices and systems that airports already use, Harel said. "(Our machine) can check and reveal very accurately exactly what's in the suitcase."

That includes triacetone triperoxide, or TATP, Harel added. Peroxide-based explosives are especially difficult for most airports' security systems to pinpoint, and as such they are extremely popular with terrorists.

Beyond that parameter, Harel was reluctant to describe exactly which explosive materials the Xurity machine would detect, since it is still in development.

He estimated that within 18 months, the company would have a few devices placed in a few airports. Xurity was established in 2003, but began working in earnest in July 2007. The company is part of a technology incubator run by the Technion -- Israel Institute of Technology in Haifa. In Israel, incubators are a popular way to get startup companies off the ground -- the incubator provides facilities, and sometimes guidance and funding.

In July, the company attracted its first outside investment, of \$800,000. At the moment, the company is not actively seeking more investment capital, Harel said, but he added that within six months he expected the firm to add to its roster of investors.

Xurity joins a list of other Israeli companies looking to streamline the explosives-detection process in airports (and public transportation, stadiums and other securityrisk venues). Acro, Scent Detection Technologies and TraceGuard, to name a few, all work in this realm.

"All those companies that you mentioned detect traces of explosive material," Harel said when asked what distinguishes Xurity. In other words, other technologies are looking for evidence that a person has handled explosive material or that a bag has come in contact with it.

However, the Xurity technology works in "bulk detection," Harel explained. "Terrorists can hide (explosive) material without leaving traces around - - today, the person who prepares the explosive isn't the same person who packs the bag, and isn't the same person who transports the bag, and isn't the same person who takes it on the plane," he said. This way, the person and the outside of the bag are free from the traces that these other technologies detect -- all the explosive material is hidden inside.

The entire airport-security market has been going high-tech as terrorism threats increase. Last year Business Week featured some of the technologies that have been developed since the Sept. 11, 2001, terror attacks.

The publication quoted Jack Riley, a homeland security expert with the RAND Corp., as saying that "explosive detection will be among the greatest challenges facing (the U.S. Transportation Security Administration) in coming years."

Some of the other developments on the market include trace portal machines, sometimes called puffers, which look like metal detectors. "When a passenger stands on the threshold, the machine fires brief jets of air at him and then tests for traces of explosives. The technology can also be used to detect other substances like narcotics," the report noted.

Other airports have started to employ backscatter Xrays. Though these quickly and easily detect banned objects, they also penetrate clothing, raising serious privacy issues.

Xurity's Harel emphasized that the goal of his company's system is called "alarm resolution" in the industry --- that is, protecting passengers but not delaying them with false alarms and lengthy checks. "The problem will only growi," he said.

Ness Technologies wins Prague digital map project

Ness Technologies Ltd. (Nasdaq: NSTC) will implement the \$6 million Digital Map of Prague project for the municipality. Ness will create a digital map of the city, which will serve as a reference source for the municipality's geographical information systems.

Ness added that the project would also simplify planning queries, support various authorities, and benefit the Czech capital's citizens.

Ness actually began the development and implementation phase of the digital map solution in October 2007, and will provide project management and analytical consulting services for the project as a whole, in its role as integrator.

The company said that its partner in the project was T-Mapy, a geographical information systems (GIS) provider in the Czech Republic backed by Sweden's T-Kartor. It added that the digital map project uses standard ESRI and Oracle systems, which are standard GIS platforms in the US and EU, including in the Czech Republic.

Ness Czech managing director Mirko Kalous said, "We were selected for the Digital Map of Prague engagement based on our successful implementation and continuing development of Real Estate Registry

Information System, a unique solution built for the Czech Office for Surveying, Mapping and Cadastre and drawing on our deep experience and knowledge of GIS solutions. This contract supports our long-term focus on the state and local administration sectors in Eastern Europe."

Israeli firms raise record capital in 2007 offerings

Tel Aviv-listed companies raised a record amount in new issues in 2007 while turmoil from the U.S. housing market had little impact on the Israeli market, Tel Aviv Stock Exchange (TASE) officials said.

It was was one of the best years for the Israeli economy, as demonstrated by rapid growth, the government's fiscal discipline and price stability, Saul Bronfeld, TASE chairman said.

"The positive developments in the capital market raised trading volumes and new issues," he said.

TASE is becoming a major non-bank credit alternative as companies raised more than \$25 billion this year. This included \$5 billion in equities and \$21 billion in bonds, up 85 percent and 90 percent, respectively, from 2006.

TASE said 56 companies, including 20 in the high-tech sector, raised about 10.3 billion shekels (\$2.64 billion) in initial public offerings on the exchange, compared with 37 companies raising 3.3 billion shekels in 2006.

The amount raised in offerings was significantly boosted by a 6.4 billion shekel offering, the largest ever in the Israeli market, when the government sold its 56 percent stake in Oil Refineries ORL.TA in February.

Key share indexes rose markedly with the Tel Aviv-100 index .TA100 peaking at a new high of 1199.38 points and the TA-25 .TA25 blue chip index reaching a record 1248.80 points.

Trading volumes increased to a daily average of \$500 million for equities, up 55 percent from 2006, and \$800 million for bonds, more than double the volume in 2006.

The Tel Bond-20 index launched earlier in the year reached a value of \$900 million and the stock exchange said it is considering adding a Tel Bond-40 and a Tel Bond-60 index.

While TASE diversified its investments products, adding 150 exchange traded funds to reach a total 240 ETFs, 2007 was also a year of increased globalization for the stock exchange.

"We strive ... to make Israel an integral part of the global market," TASE Chief Executive Ester Levanon said.

During the year, TASE signed cooperation agreements with the London Stock Exchange and Nasdaq, and Levanon noted the exchange was working on projects with both bourses aimed at increasing cooperation.

"We have started the ball rolling for increased cooperation with the LSE and hope to report on new developments shortly," she said.

Taiwan and Israel to cooperate on info technology and biotech

Taiwan's National Development Fund (NDF) will invest \$30US million in Israel's GIZA Venture Fund V to facilitate the transfer of information technology and biotechnology from Israeli companies to their Taiwanese counterparts, an NDF spokesman said.

Yeh Ming-feng, an executive secretary of the NDF, said GIZA is Israel's third-largest private venture capital company and that the NDF also previously invested \$450NT million (\$14US million) in the GIZA Venture Fund IV.

"Israeli companies have first-rate research and development abilities in information technology, biotechnology and security technology," said Yeh, who is also vice chairman of the Council for Economic Planning and Development (CEPD).

However, Israeli companies lack capital, which Yeh said can be provided by Taiwan.

Since both sides began cooperating in 2005, GIZA Venture Fund has completed seven technology transfer projects involving Taiwanese companies, including Taiwan Semiconductor Manufacturing Co.(TSMC).

"As the Taiwanese government has agreed to make further investment in the Israeli fund, it has also asked GIZA to help assist the development of Taiwan's industries," said Yeh.

GIZA has agreed to work with the NDF on a large investment project in Taiwan in the near future --possibly next year at the earliest, Yeh said, adding that the project will greatly boost Taiwan's technology.

GIZA is also discussing with Israeli companies how to invest in Taiwan, according to Yeh, who said Israeli companies will first focus on the information technology and biotechnology sectors.

IDE to build desalination plant in Australia

Desalination Enterprises Technologies (IDE) won a tender to build a desalination plant worth more than \$100 million in western Australia

IDE, jointly owned by Israel Chemicals [ICL.TA] and the Delek Group [DELKG.TA] will build a plant capable of producing 50 million cubic meters of water annually as part of an iron-mining project in Pilbarra, the paper said.

The company in November postponed a planned initial public offering in London as a result of prevailing global market conditions. It had aimed to raise up to \$200 million in global depositary shares.

5.3% growth for Israel's economy in 2007

The growth rate in Israel is double the OECD average.

Israel's economic growth reached 5.3% in 2007, the Central Bureau of Statistics reports. 2007 rounds off five consecutive years of rapid growth, the growth rate in four of which exceeded 5%.

The growth rate in Israel is double that of OECD countries and almost three times that of the US. Per capita growth reached 3.5%, the highest of all Western countries. Business product grew by 6.3%, while unemployment stood at a monthly average of 7.4%.

The standard of living (private consumption per capita) in Israel grew by 5.3%, while total private consumption rose by 7%. 2007 could be best described as the year of the consumption and growth boom; this year's economic performance will be difficult to repeat in 2008.

IBM buys another data storage company

IBM said that it has bought XIV, an Israeli storage technology company, in an effort to expand its offerings to companies generating large amounts of data.

Terms of the deal weren't disclosed. Israeli media reported last week that Big Blue was in talks to buy XIV for a sum between \$300 million and \$350 million.

IBM said XIV's main product, a data storage platform known as Nextra, is particularly attractive to socalled "Web 2.0" companies generating lots of data online. Traditionally, companies generating such large amounts of data continually spend huge sums to ramp up their data-storage offerings, but XIV says Nextra can reduce those expenditures significantly without sacrificing quality.

XIV will become part of IBM System Storage, a business unit in the company's systems and technology group.

"The acquisition of XIV will further strengthen the IBM infrastructure portfolio long term and put IBM in the best position to address emerging storage opportunities like Web 2.0 applications, digital archives and digital media," Andy Monshaw, general manager of IBM System Storage, said in a written statement. "The ability for almost anyone to create digital content at any time has accelerated the need for a whole new way of applying infrastructure solutions to the new world of digital information. IBM's goal is to provide the leading technologies and solutions at every layer of the data center -- storage, servers, software and services -- to address these new realities IT customers face."

Oral anti diabetic substance discovered

Research in the Department of Biology at the Faculty of Science and Science Education of the University of Haifa discovered a substance that may become an oral treatment for diabetes and its complications. The substance, which is derived from yeast, is called Glucose Tolerance Factor (GTF). "The research is now at the stage where the substance has been successfully tested on diabetic rats and was found to reduce sugar and lipids in the blood of the treated animals. The next stage of the research is to evaluate GTF efficacy in humans," said Dr. Nitsa Mirsky, who is conducting the research.

Diabetes is recognized as a major global health problem. Diabetes affects 5%-10% of the population in developed countries, while in developing countries the disease has been recently declared an "epidemic". Diabetics suffer from lack of insulin or a deficiency in the body's ability to respond to insulin. Diabetes is a

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chronic illness with no cure and can lead to kidney failure, heart problems, strokes or blindness, as well as other complications. Approximately 50% of diabetics are treated with insulin, which has to be injected, while the rest are treated with oral medications which tend to be more difficult to regulate and often have side effects.

According to Dr. Mirsky, there are a number of problems with insulin treatment; the main one being that insulin is not always an effective treatment, due to gradual development of resistance to the hormone. An additional problem is that insulin doses are not necessarily synchronized with the patient's physical activities or eating intervals. A large dose of insulin injected before a diabetic patient eats, for example, can cause a sudden drop in blood sugar (hypoglycemia) that can result in a diabetic coma and ultimately death. In addition, the fact that insulin must be injected is in and of itself difficult for many patients.

This current research was conducted on two levels: on diabetic rats and on the molecular-cell level. The results indicate that GTF acts similarly to insulin in the rats, lowering the level of glucose, and of LDLcholesterol, (the "bad" cholesterol), and raising the level of HDL-cholesterol (the "good" cholesterol). GTF inhibited oxidation processes that can cause atherosclerosis and result in further complications of the disease like strokes and heart attacks.

Moreover, when GTF is given at early stage of the disease, it could prevent or delay renal complications. GTF also helped to prevent cataracts and retinal damage. It was also found that GTF improves the effectiveness of injected insulin. Further research is needed in order to find a combined regimen of insulin and GTF as a potential treatment for diabetes.

Gilat in Mexican broadband deal

Gilat Satellite Networks Ltd. (Nasdaq: GILT; TASE: GILT) will supply Mexico's Grupo Elektra SA de CV with a customized SkyEdge satellite hub station and 1,964 very small aperture terminals (VSATs) for use in several Latin American countries including Mexico, Guatemala, Honduras, Peru, El Salvador, Panama and Argentina. Gilat did not disclose the size of the contract. American specialty retailer and financial service company. Grupo Elektra has been a Gilat customer for more than a decade, having previously bought a SkyStar Advantage VSAT network and later a

SkyBlaster 360e network. The new SkyEdge network will provide Grupo Elektra broadband communications for point-of-sale data management, fast credit card processing, software downloads, high-speed Internet access, corporate communications and terrestrial backup connectivity.

New Technique Helps Blind to see



A small video camera mounted in a pair of sunglasses aims to give blind people a possibility to "see". The entrepreneur behind this technology called Forehead Sensory Recognition System (FSRS) has chosen the Nordic countries to be the first test market.

"In the Nordic countries the handicap care system is well developed and there are also excellent resources for research and development available. Therefore we would like to start here" says Mr. Yoneso Kanno, formerly employed in research with the IBM Corporation. Mr. Kanno is the founder of EyePlusPlus working together with Mr. Harlan Jacobs.

Involved in the project is also Mr.Yoni Peres, veterinarian at an Israeli Center for lead dogs and son of the Israeli President Mr. Shimon Peres.

This technique has during the week been presented to a number of researchers in Copenhagen, Lund and Gothenburg and was shown for the first time to the press in Stockholm.

The system has been compared to an "advanced blind cane" and works with a little video camera which is mounted in a pair of sun glasses. The camera will register what it sees and then send the information to a computer that the user wears in his/her belt.

The computer sends out electro impulses to a head band worn by the user. The impulses are translated to signals which with training can be interpreted and guide the user to identify this/her surroundings.

The company is waiting for FDA approval in the United States.

The computer sends out 512 electro impulses to a headband worn by the user

Israel unveils missile designed to intercept Hezbollah rockets

Rafael Advanced Defense Systems, Israel's arms development firm, unveiled a new missile system Tuesday designed to intercept mid to long-range rockets and missiles of the kind used by Hezbollah during the Second Lebanon War.

The firm introduced the "Stunner" missile during a visit from Prime Minister Ehud Olmert, the Prime Minister's Office said. The Stunner will be incorporated in the new Magic Wand anti-missile system.

Magic Wand" is intended to intercept missiles with a range of 40-250 kilometers, like Hezbollah's Zilzal and Fajr missiles. The development, in conjunction with a Pentagon-backed American company, is expected to cost some NIS 1 billion.

"Magic Wand," together with the simultaneously developed Iron Dome anti-ballistic system, will complement the Arrow missile defense system, which intercepts long-range missiles.

During Tuesday's visit to the Rafael headquarters, Olmert reviewed the development of various systems, in line with the cabinet policy to upgrade anti-missile protection, which was approved about a year ago.

Teva Pharma to buy CoGenesys for \$400m.

Petach Tikva, Israel - based drug manufacturer Teva Pharmaceutical Industries Ltd. (TEVA | announced a definitive agreement to acquire privately held Rockville, Maryland - based CoGenesys, Inc. for \$400 million in cash. The deal to be funded from internal resources will be closed in the first half of 2008.

The company said CoGenesys, was a division of Human Genome Sciences Inc. (HGSI | news | PowerRating | PR Charts) and later in 2006 spun off as an independent company. CoGenesys is focused on the development of peptide and protein based medicines.

Teva expects that the acquisition would open up access to an attractive innovation pipeline, an eminent research team and further help to become a significant player in biogenerics market. CoGenesys has a 48,000 square feet state of the art facility and has a team of 70 professionals. Further, Teva expects that the addition of CoGenesys would help them deliver high quality, affordable pharmaceuticals worldwide. Commenting on the acquisition, Shlomo Yanai, president and chief executive officer of the company said, "Biopharmaceuticals will be a long-term growth driver for Teva, and this transaction represents an important spring-board in our efforts to establish ourselves among the leaders in this market. CoGenesys' breadth of technologies and the depth of their team and pipeline complement Teva's large-scale operations, extensive resources and its proven expertise in bringing drugs to market."

IAI' Advanced Synthetic Aperture Radar (SAR) Satellite was Launched Into Orbit on an Indian PSLV Launcher.

Management of Israel Aerospace Industries Ltd. (IAI) announced that an advanced imaging satellite produced by IAI, employing synthetic aperture radar (SAR) technology, was successfully launched into orbit today (January 21, 2008, 05:45 Israel time) on an Indian Polar Satellite Launch Vehicle (PSLV).

The satellite, under the brand name TECSAR, was launched at the SHAR test field in southeast India in collaboration with a team of Indian and Israeli experts. The launch was carried out in accordance with a cooperation agreement between the Government of India and IAI relating to space activities.

The TECSAR's signal was received at the IAI ground station 80 minutes after launch (07:10 Israel time), immediately upon its reaching the station communication range. By all indications so far, the satellite is functioning properly.

The satellite is now orbiting the Earth, and IAI's engineers and scientists have commenced the prescribed series of in-orbit tests to verify its performance. Due to the complexity of the TECSAR, as compared to satellites previously produced by IAI, the in-orbit tests are scheduled to continue for several weeks, and the first images are scheduled for receipt 14 days after launch.

The TECSAR is the first satellite of its kind developed in Israel, and ranks among the world's most advanced space systems. It carries a SAR payload, designed to provide images during day, night and all weather conditions, including under cloud cover. The satellite is controlled and monitored by an IAI-based ground

station. This satellite was designed, built and integrated by IAI's scientists and engineers, with the MBT Space division acting as prime contractor and Elta Systems Ltd., an IAI subsidiary, provided the SAR payload. The project included contributions from other IAI divisions, as well as from leading Israeli hi-tech companies such as Rafael, Tadiran-Spectralink and Rokar.

Israel currently operates a number of reconnaissance satellites, including Ofek 5 and Ofek 7, as well as several commercial satellites such as the Amos and EROS series. A total of 11 Israeli satellites have been placed in orbit, a number of them still operational.

The Ofek 5 was launched in May, 2002, and the Ofek 7, last July, from the Palmachim missile range on Israel's coast.

Israel intends to launch another two spy satellites as part of its strategic cooperation commitments

Elbit Systems wins \$40m thermal imaging contracts

Elbit Systems Ltd. (Nasdaq: ESLT; TASE: ESLT) unit Elbit Systems Electro-Optics Elop Ltd. has won \$40 million in contracts from several customers for its Coral and Coral-CR hand-held thermal imaging cameras. The cameras are intended for infantry, scouts and special units. The company did not disclose the size of the contracts or the customers, but "foresees substantial potential for follow-on orders."

El-Op general manager Haim Rousso said, "This latest string of orders continues our momentum as a major force in the field of thermal imaging. The Coral handheld systems cover the full spectrum of military and homeland security applications."

Sensory respiration device for newborn Babies Engineers at the Technion-Israel Institute of Technology have developed an innovative device for monitoring respiration, especially in premature babies. The noninvasive technology, which is being clinically tested at the Carmel Medical Center in Haifa, uses sensors to monitor lung activity.

Existing equipment in intensive care units does not monitor for respiratory problems and up to six hours can elapse from when a problem occurs in lung ventilation until medical personnel detect it. Detection therefore generally occurs only when the baby is already exhibiting signs of distress and there is a danger of irreversible damage to the body's organs.

The unique device developed at the Faculty of Biomedical Engineering can detect respiratory irregularities in newborn babies at an early stage, reducing the risk of long-term damage to vital organs. Early detection of respiratory problems, such as accumulation of air between the lungs and chest cavity walls, partial blockage of the air passages, or breathing from only one lung is prevented, reducing the risk of complications and irreversible brain damage.

Israeli company Pneumedicare, headed by Technion academics Professor Amir Landesburg, Dr Dan Waisman and Dr Carmit Levy, is currently developing the technology for clinical use.

Dr. Carmit Levy, Director of Pneumedicare commented: "We directly monitor the mechanics of respiration by placing sensors on two sides of the chest and the upper part of the stomach of a premature baby on a respirator. Thus, we can monitor a lack of symmetry between the two lungs and the development of mechanical disturbances in lung ventilation."

Israel's Technology Creates an Investment Goliath

Israel, with fewer than 7 million people, has become a Goliath in the world of technology and medicine.

It is third only to America and Canada in the number of companies listed on the Nasdaq, ahead of economic powerhouses like Germany, England and China.

Israel's economy is robust, despite a government rife with scandal and an impasse with the Palestinians over the fate of the West Bank and Gaza.

Bruce Aust, executive vice president of Nasdaq, said there are 75 Israeli companies worth a total of \$60 billion listed on the Nasdaq. " Israel has very few natural resources, so Israelis have to be very entrepreneurial and innovative to create jobs for its citizens," Aust said. He indicated that he has heard of numerous cases where three or four people have a great idea that eventually becomes a successful company on the Nasdaq.

Among the Israeli companies listed on Nasdaq is Teva Pharmaceutical one of the world's top manufacturers of generic drugs and Check Point Software, a company noted for its cutting-edge systems in computer security.

"Israel is the Silicon Valley of the Mediterranean," said David Anthony, a partner in 21 Ventures, a venture capital company that has invested \$75 million in Israeli companies.

Israeli researchers in recent years have developed, among other things:

Instant messaging on the Internet

· Wireless computer chips for Intel (INTC: 19.00, -0.33, -1.70%

 Miniature video camera capsules to examine internal organs

- Firewall security software
- Medicines to slow the advance of multiple sclerosis

American troops use Israeli portable digital x-ray machines in Iraq and Afghanistan that don't require film for developing and are used in battlefield situations.

The United States, China and the Europeans want to collaborate with Israel because of the quality of innovations coming from its universities, said Marc Stanley, a technology official at the United States Department of Commerce who is involved with fostering collaboration between American and Israeli technology companies."The quality of their post-doctorates in medicine, nanotechnology and software development is rather incredible," he said.

More Israeli patents are registered in the United States than from Russia, India and China combined, despite a population disadvantage. "There are two and a half billion people in those countries and we have less than seven million in Israel," said Ron Dermer of the Israeli embassy.

Venture capital money is pouring into Israel to help develop new technologies in computer software, biotechnology and electrical engineering. American companies invested more than \$6 billion in Israel in 2007, according to Yair Shiran, the country's economic minister to North America. "After America, Israel is one of the most important centers for new technology," said Shiran.

American corporate giants like Motorola .Cisco

Systems, Intel and IBM have research centers in Israel to develop new technologies they can market worldwide. It is where Intel developed its Centrino chip to enable computers to run longer on battery power and connect more easily to wireless networks. IBM opened its research center in Haifa in 1972 with 15 people. The number is now 800.

IBM is currently collecting data gathered by major European universities to determine when the strain of the HIV/AIDS virus will start to become resistant to the drug cocktail now being used to contain it. Pnina Vortman, a researcher at IBM's Haifa center explained in an interview that IBM wants to be able to give scientists a month's advanced notice before the resistance starts in order to allow them to adjust the drug mixture.

Scientific American magazine has selected the work in artificial intelligence done by two Israeli academics as being among the greatest advancements in science in 2007. The scientists from Tel Aviv University conducted experiments to simulate human intelligence by creating an organic memory chip using neurons from the brains of rodents. Their ultimate goal is to make computers think creatively.



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