

ISRAEL HIGH-TECH & INVESTMENT REPORT

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The Anatomy of a Hi-Techie

Much has been written about Israel's technological prowess and ingenuity. Recognition has been awarded and in the United States alone Israel has the single largest number of companies listed on Nasdaq, the stock market specializing in technology issues.

Less attention has been focused on the factors responsible for this excellence. Perhaps, first and foremost, is the high level of education and an innate striving for success. Two Israelis have won the 2004 Nobel Prize for Chemistry for their ground-breaking work in cancer research. In the past four years four Israelis have been awarded Nobel Prizes.

Education is the highest Jewish value in every family. The result is that Israel has the highest ratio of university degrees to the population in the world. Moreover, twenty-four percent of Israel's workforce holds university degrees - ranking third in the industrialized world, after the United States and Holland - and 12 percent of them hold advanced degrees.

The country's institutes of higher learning have gained international standing. The Weizman Institute of Science has been voted the best university in the world for life scientists, to conduct research.

Scientific studies are in the forefront and as a result Israel produces more scientific papers per capita than any other nation by a large margin - 109 per 10,000 people - as well as one of the highest per capita rates of patents filed.

Israel has compulsory army service. Every youngster, at the age of 18, enters the army for three years. The army has served as a front-runner in conceptualizing and developing state-of-the-art weapons systems. Its technological and research departments have contributed enormously to providing cutting-edge technology whose use is far wider than state-of-the-art

weapons systems. Such units have made world-class breakthroughs in ballistic missile technology, electro-optics and other fields. Soldiers from these units are highly sought after in the hi-tech world, and have gone on to adapt their experience from these units to use in household PCs, internet portals, wireless communication and even in cancer research.

The Government of Israel has taken a strong stance in the financial support of young technological enterprises.

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Bananas that defend themselves

The R&D Fund is the main support channel of the OCS, in terms of budget, and it is open to all Israeli registered firms wishing to engage in technological research and development. The proposals are screened by technological evaluators, the final approval being that of the Research Committee, chaired by the Chief Scientist. The annual budget of \$300 million is spent on about 1,000 projects being undertaken by 500 companies.

In order to attract foreign investments the Government has created the Law for the Investment of Foreign Capital. The key of the law is an outright 18% cash grant of capital invested. As a result companies such as Intel, IBM and Motorola have set up shop in Israel and employ thousands of workers.

63 Israeli start-ups were acquired by Israeli or foreign companies last year for an aggregate \$2.75 billion. 332 start-ups were founded and 204 closed down in 2005, and Israel had 2,622 start-up operating at the end of the year.

Finally, salaries in high-tech companies are a considerably higher than those of paid in other professions/

We take this opportunity to wish our subscribers and the many visitors to our web site a Happy, Healthy, Prosperous and Peaceful New Year.

OTI Delivers Garanti Bank of Turkey Contactless Card Solutions

On Track Innovations Ltd. (OTI) (Nasdaq: OTIV), a specialist in contactless microprocessor-based smart card solutions for homeland security payments, petroleum payments and other applications, announced that it is providing Garanti Bank of Turkey 'Tap & Go inlay solutions. Garanti bank is reissuing "Tap & Go" cards, which use MasterCard PayPass technology, to its Bonus card holders.



Mehmet Sezgin, General Manager, Garanti Payment Systems, said: "OTI's extensive experience provides a reliable

and cost-effective way to bring contactless solutions to our market. The possibility of any form factor necessary such as inlays, key fobs, wristwatches, including reader solutions, will help us differentiate ourselves in Turkey's highly competitive payments market.

Garanti Bank is the third largest private bank in Turkey.

Established in 1990, OTI (Nasdaq: OTIV) designs,

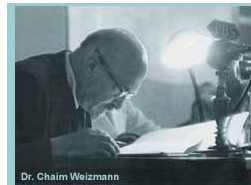
develops and markets secure contactless microprocessor-based smart card technology to address the needs of a wide variety of markets. Applications developed by OTI include product solutions for petroleum payment systems, homeland security solutions, electronic passports and IDs, payments, mass transit ticketing, parking, loyalty programs and secure campuses.

OTI has a global network of regional offices to market and support its products. The company was awarded the Frost & Sullivan company of the Year Award for 2005 and 2006 in the field of smart cards.

Science Corner

Bacteria Beat the Heat

How do some microorganisms manage to exist and even thrive in surroundings ranging from Antarctica to boiling hot springs? A team of scientists from the Weizmann Institute's Plant Sciences Department, led by Prof.



Dr. Chaim Weizmann

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Avigdor Scherz, has found that a switch in just two amino acids (the building blocks of protein) can make a difference between functioning best at moderate temperatures and being adapted to living in extreme heat. The results of their research, which recently appeared in *Nature*, might have implications for future attempts to adjust crops to differing climate conditions or improve enzyme efficiency in industrial processes.

The team compared two different kinds of bacteria – one found in moderate environments and the other, an intense heat lover. Both were photosynthetic (that is, using the sun's energy to create sugars for food). The focus of the research was a reaction that takes place in enzymes in the photosynthetic "reaction center" of the bacterial cell. While gradually raising the surrounding temperature, the scientists timed this reaction to see how rates changed as things heated up.

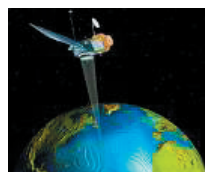
A general rule for enzyme reactions states that as the heat rises, so does the reaction rate. Contrary to this rule, and the scientist's expectations, both reaction rates peaked at a certain point, and remained steady thereafter. For each enzyme, the peak occurred in the bacteria's "comfort zone."

Further comparisons of the nearly identical enzymes turned up differences in just two of the hundreds of amino acids making up the enzyme sequence. When the scientists replaced these two amino acids in the enzyme adapted to the moderate temperatures with those of the heat-loving enzyme, they observed an increase of about 10 degrees in the average temperature at which the reaction rate peaked.

Scherz commented that this study shows that enzyme efficiency is tuned to the average temperature of the bacterial habitat, rather than the immediate conditions.

This may protect the cells from harmful swings in enzyme activity. We can envision using this knowledge, for instance, to facilitate enzymatic reactions in different applications, enhance crop production in areas subject to extreme temperature changes or create new resources for biofuel production that will not only provide more biomass per acre, but absorb more of the greenhouse gas, carbon dioxide, as well."

Time in Space



Stars may lead fascinating lives but sometimes, it's in death that they really shine. Some stars finish up as black holes but, a moment before the end, they explode, sending material in all directions and shining with a light that can be seen throughout the universe. This end only comes to the heavies of the neighborhood, those that weigh 30 times as much as our sun or more. When it happens, their dazzling light can be seen at much greater distances than previously. Thus, early observers of the heavens saw bright points of light appear in the sky where none had existed the night before, and they dubbed them "supernova" or "new stars."

Until now, scientists had only been able to spot supernova several days after stars in the process of exploding had begun to brighten. But the scientists who investigate this phenomenon needed to be able to observe what happens to these stars in real time. That's precisely what NASA scientists have managed to do, for the first time, and their achievement has confirmed theoretical research carried out by Prof. Eli Waxman of the Weizmann Institute.

Aided by NASA's advanced research satellite, Swift, the scientists succeeded in detecting the supernova just 160 seconds after the event began. Seeing the supernova so early allowed the scientists to observe, in addition to the material being thrown out in all directions, jets of gamma rays and X rays shooting out from the vicinity of the explosion. This confirmed the theory that supernovas are the source of gamma ray bursts that have been measured in the past. They also found that the star was composed mainly of oxygen and carbon, signs that the star was, indeed, very heavy. For the first time, scientists were able to identify shock waves that give rise to the gamma and x-ray radiation emanating from the center of the star and moving toward the surface. These findings have bolstered the theoretical model of such supernova explosions proposed by Prof. Waxman several years ago.

Silence of the Amoebae

Weizmann Institute scientists render a disease-causing pathogen harmless

Freedom of expression is great, but silence is golden – at least when it comes to amoebae – intestine-dwelling

parasites that cause life-threatening dysentery in many parts of the world. Three years ago, scientists at the Weizmann Institute accidentally discovered a way to silence the expression of a key amoebic gene, one which codes for a toxic protein that kills human intestinal cells infected with this devastating illness. Now the scientists have developed a way to successfully silence the expression of two additional virulence genes in the same amoebae.

Rivka Bracha and colleagues in the lab of Prof. David Mirelman in the Biological Chemistry Department had shown that expression of the gene coding for the toxic protein could be prevented by inserting a plasmid (a small loop of DNA) containing a copy of a specific part of that gene into the amoeba cell nucleus. Introducing the plasmid led to the modification of DNA “packing” proteins, causing the DNA-protein packages to become more tightly coiled – something like a tangled telephone cord – and causing an irreversible silencing of gene expression. In a recent paper published in PLoS Pathogens, the Weizmann scientists reported the silencing of two additional virulence genes in the same amoebae using a similar plasmid-induced principle.

The disabled amoebae, though rendered harmless, still display the same repertoire of surface antigens (markers recognized by the immune system) as the disease-causing strain. The scientists now plan to test the ability of these silenced amoebae to serve as a live vaccine by evoking an intestinal immune response. If successful, it may put an end to amoebic diseases that claim the lives of thousands yearly and afflicts millions more.

A Better Water Test

Water is essential for life. Nevertheless, even small amounts of water in the wrong places – fuels, lubricants, or organic solvents – can cause motors to sputter, metal parts to rust, or chemical reactions to go awry. That’s why one of the most common lab tests performed in industry is one that looks for traces of water in other substances, even though the test itself is complicated and time-consuming.

A new method for detection and measurement of small amounts of water, developed in the lab of Dr. Milko van der Boom in the Weizmann Institute’s Organic Chemistry Department, might allow such tests to be performed accurately and quickly. Van der Boom and postdoctoral fellow Dr. Tarkeshwar Gupta created a versatile film on glass that’s only 1.7 nanometers thick,

which can measure the number of water molecules in a substance even when it contains only a few parts per million.

“The problem,” says van der Boom, “is that water is hard to detect and to quantify.” His method is a departure from previous sensing techniques. In general, such sensor systems are based on relatively weak, but selective “host-guest” interactions. In the Weizmann Institute team’s sensor, metal complexes embedded in the film steal electrons from the water molecules. When the number of electrons in the metal complexes changes, so does their color, and this change can be read optically. Devices based on optical readout do not need to be wired directly to larger-scale electronics – an issue that’s still a tremendous challenge for much of molecular-based electronics.

The test can be done in as little as five minutes, and the molecular film can be returned to its original state by washing with a simple chemical. The film also remains stable, even at high temperatures and with repeated use. And, it can be deposited in an inexpensive, one-molecule-thick layer on glass, silicon, optical fiber or plastic. The ease and low cost of fabrication may also make such films ideal for one-time use. Testing for water in fuel or solvents might become as simple as checking chlorine levels in a swimming pool. Optical detection and quantification by electron transfer could potentially work for numerous substances other than water. The scientists are now exploring the possibility of adapting the method to testing for trace amounts of materials or substances such as specific metal ions or gases.

Elron invests \$5 million in Neurosonix startup



Elron Electronic Industries (Nasdaq: ELRN) has invested \$5 million in Neurosonix, placing the money in two stages.

The Evergreen venture capital fund and Elron are new investors in Neurosonix, which is raising a total of \$12 million. Other investors include veteran shareholders Peregrine, Ofer Hi-tech and the Yozma venture capital group.



At full dilution Elron will own 18% of Neurosonix, according to a pre-money company valuation of \$14 million.

Israel-based Neurosonix specializes in medical

technologies that prevent acute cerebral embolism during open-heart cardiac surgery or during other invasive medical treatments.

Company CEO Doron Birger says that 4% of patients who undergo open-heart surgery or bypass procedures wind up with severe brain damage. He adds that 40% to 50% of patients suffer mild to moderate brain damage because of blood clots traveling to the brain during the procedure.

Neurosonix's technology is based on ultrasound. An ultrasound wave is created at the point at which the main artery to the brain splits, allowing clots to be diverted to the lower body, which protects the brain from indirect trauma during heart surgery. Initial tests of the first device, the EmBlocker, are recently being conducted in Holland.

The Ministry of Industry and Trade has noted Neurosonix as outstanding among Israel's incubator companies in 2005.

Birger said that the company elected to focus on open heart and bypass surgery, a billion dollar a year market that is very lucrative for the medical profession. He believes that when development is completed, its product will become a must in such procedures: doctors will want a non-invasive technology that protects patients from a high probability of severe brain damage.

He projects that European sales may begin in the second half of 2007, while FDA approval is awaited.

Spinal surgery robot demonstrated in Gwinnett



At Gwinnett Technical College in Lawrenceville, USA, an Israeli company demonstrated its spinal surgery robot to potential customers and students.

Gwinnett Tech was an eager host when Mazor Surgical Technologies, whose U.S. office is in Atlanta, contacted surgical technology program director T.C. Parker to ask if the company could use its facilities for a product demonstration.

The company demonstrated for and taught surgeons from as far away as Massachusetts and California as

Mazor officials operated on cadavers.

The technology is about 2 years old and is being used in 14 hospitals worldwide, said Yair Peleg, a Mazor customer service and technical support employee.

The cost per unit is \$175,000.

The product's centerpiece is a small cylindrical robot sheathed in blue plastic. X-ray and CT scan images of the spine are fed into a computer. Using those, doctors determine where they want to drill into the vertebra and insert screws to fuse vertebrae, repair fractures or correct scoliosis.

The SpineAssist robot sits atop a platform that is mounted on the spine. The robot's arm holds a guide tube through which the drill and screws are threaded. The robot adjusts so that the tube and drill insert the screws at the right spot and angle.

Considering that mispositioning a screw by no more than 2 millimeters can mean paralysis, precision is paramount. Peleg said the robot helps doctors be accurate to within half a millimeter.

Proneuron firing most of its employees

Proneuron CEO Nir Nimrodi confirmed that the company will lay off staff shortly.

Proneuron Biotechnologies Ltd. is reported to be firing 5-8 of its 15 employees, in its second wave of lay-offs in the past six months. The lay-offs are apparently because of problems in the Phase II clinical trials of the company's product for rehabilitation of spinal cord injuries, and problems with the company's collaboration with Teva Pharmaceutical Industries Ltd. (Nasdaq: TEVA; TASE: TEVA). The lay-offs basically shut down the company's activity.

Proneuron CEO Nir Nimrodi confirmed that the company will lay off staff shortly, but declined to confirm the number of workers involved.

British company to market Hebrew Univ. molecule

Yissum Technology Transfer Company of the Hebrew University of Jerusalem has signed an agreement with Shire Pharmaceutical Group plc (LSE:SHP; Nasdaq: SHPGY; TSX:SHQ) to market the valroceamide molecule developed at





the university. Shire reported the agreement in its financial report for the second quarter filed with the London Stock Exchange.

Under the agreement, Yissum will receive an initial payment of several million dollars, and will be paid for reaching milestones. Royalties could total tens of millions of dollars if the drug reaches the market.

Valroceמיד was developed to treat disorders of the central nervous systems, especially epilepsy. The molecule is at a fairly advanced stage of development, and results of Phase II clinical trials are already being collated.

Dr. Philip Frost Leads Up To \$21m. Investment in Protalix Biotherapeutics

Protalix Biotherapeutics Ltd., a biopharmaceutical company focused on the development of plant-cell-culture-expressed recombinant therapeutic proteins, announced today that Dr. Philip Frost, former



Chairman and CEO of IVAX Corporation, has led a \$15 million round of investment in Protalix. Dr. Frost, together with a group of investors, (The Frost Group), will invest \$15 million in Protalix pursuant to a stock purchase agreement, in exchange for ordinary shares representing approximately 14% of Protalix on a fully-diluted basis, and will receive a short term warrant for an additional 5% of Protalix for an investment of an additional \$5.3M. After the closing of the investment, Dr. Philip Frost and Dr. Jane Hsiao, the former vice chairman of IVAX, will be joining Protalix's Board of Directors. The stock purchase is expected to close within a month.

In addition, Protalix has entered into a merger agreement with Orthodontix (OTIX:OTC.BB), a US publicly-held company controlled by Dr. Frost. Under the terms of the merger agreement, the existing shareholders of Protalix (excluding the Frost Group) will hold 85% of the shares of Orthodontix and the current shareholders of Orthodontix and the Frost Group will hold the remaining 15% of the shares of Orthodontix. The merger is subject to customary covenants and several additional conditions, and is expected to close in the fourth quarter of 2006. Following the merger, Orthodontix will change its name to Protalix Biotherapeutics Inc. and intends to

apply for listing on a major stock exchange. Dr. David Aviezer, the CEO of Protalix, will serve as the CEO of the company.

This investment will allow Protalix to pursue advanced clinical studies for its enzyme therapy for Gaucher disease and advance additional drug development programs. Protalix has recently announced that it has completed Phase I clinical studies for its enzyme therapy for Gaucher disease. The company accomplished Phase I trials after receiving Investigational New Drug approval from the FDA for use of its proprietary plant cell bioreactor system for the production of the human recombinant glucocerebrosidase.

Dr. David Aviezer, Protalix's CEO said: "We are privileged to have Dr. Frost join as a shareholder and board member. We believe that this investment, made by a top tier industry leader, provides important recognition of Protalix's technology and vision. We are confident that Protalix's Board of Directors will highly benefit from the knowledge and experience brought by Drs. Frost and Hsiao".

"We are excited by the breadth of Protalix's unique plant cell culture bioreactor platform, the quality of the management team and the prospects for the company's products and technology, particularly its lead product for the treatment of Gaucher Disease, which is progressing through the clinical development process," stated Dr. Phillip Frost. "Based upon its unique capabilities to manufacture safe and efficacious recombinant proteins for a number of therapeutic areas, we expect that Protalix will establish itself over the coming years as an innovative leader in this area."

Israeli company sells anti-riot vehicles to China ahead of Olympics

An Israeli company developing, manufacturing and marketing anti-riot technologies has recently signed a collaboration with a Chinese firm. The products of the collaboration will be used by Chinese authorities during the 2008 Beijing Olympics.



Beit Alpha Technologies, of Kibbutz Beit Alpha and the unnamed Chinese company will jointly develop and market vehicles for riot control and dispersal. The vehicles will be included in the deployment of Chinese security forces ahead of the Olympic Games.

Beit Alpha Technologies recently participated in the China Police exhibition, an international show of policing equipment held in Beijing. The products exhibited by the company included police vehicles for riot dispersal inside and outside stadiums.

The company also sent a vehicle to Chinese police in order to demonstrate its innovative technologies. Local police in China's provinces will engage the vehicle in riot dispersion as part of its deployment ahead and during the Olympic Games.

Biometric device aims to identify terrorists

The Wall Street Journal recently reported a novel Israeli technology which aims at "identifying hostile intent. At airport security checkpoints in Knoxville, Tenn., this summer, departing passengers were asked to step behind a curtain, sit in a metallic oval booth and don headphones.

With one hand inserted into a sensor that monitors physical responses, the travelers used the other hand to answer questions on a touch screen about their plans. A machine measured biometric responses — blood pressure, pulse and sweat levels. The results were analyzed by software. The objective was to identify out U.S. officials who were carrying out make-believe terrorist missions.

The trial of the Israeli-developed system represents an effort by the U.S. Transportation Security Administration to determine whether technology can spot passengers who have "hostile intent." In effect, the screening system attempts to mechanize Israel's vaunted airport-security process by using algorithms, artificial-intelligence software and polygraph principles.

Neither the TSA nor Suspect Detection Systems, the Israeli company, will discuss the Knoxville trial, whose primary goal was to uncover the designated bad guys, not to identify threats among real travelers. They won't even say what questions were asked of travelers, though the system is generally designed to measure physical responses to hot-button questions like "Are you planning to immigrate illegally?" or "Are you smuggling drugs."

The test is part of finding new ways to combat terrorists using technology. Authorities are convinced that beyond hunting for weapons and dangerous liquids brought on board airliners, the battle for security lies in identifying dangerous passengers.

Israeli security is based on personal contact whereby the security person enters into a dialogue with the traveller.

The method isn't intended to catch specific lies, says Shabtai Shoval, chief executive of Suspect Detection Systems, the start-up business behind the technology dubbed Cogito. "What we are looking for are patterns of behavior that indicate something all terrorists have: the fear of being caught," he says.

Security specialists say such technology can enhance, but not replace, existing detection machines and procedures.

"You can't replicate the Israeli system exactly, but if you can incorporate its philosophy, this technology can be one element of a better solution," says Doron Bergerbest-Eilon, chief executive of Asero Worldwide consulting firm and a former senior official in Israel's security service.

To date, the TSA has more confidence in people than machines to detect suspicious behavior. A small program now is using screening officers to watch travelers for suspicious behavior. "It may be the only thing I know of that favors the human solution instead of technology," says TSA chief Kip Hawley.

The people-based program — called Screening Passengers by Observation Technique, or SPOT — began undergoing tests at Boston's Logan Airport after 9/11 and has expanded to about a dozen airports.

Trained teams watch travelers in security lines and elsewhere. They look for obvious things like someone wearing a heavy coat on a hot day, but also for subtle signs like vocal timbre, gestures and tiny facial movements that indicate someone is trying to disguise an emotion.

TSA officers observe passengers while consulting a list of more than 30 questionable behaviors, each of which has a numerical score. If someone scores high enough, an officer approaches the person and asks a few questions.

"All you know is there's an emotion being concealed. You have to find out why the emotion is occurring," says Paul Ekman, a San Francisco psychologist who

pioneered work on facial expressions and is informally advising the TSA. “You can find out very quickly.”

More than 80 percent of those approached are quickly dismissed, he says. The explanations for hiding emotions often are innocent: A traveler might be stressed out from work, worried about missing a flight or sad because a relative just died. If suspicions remain, the traveler is interviewed at greater length by a screener with more specialized training.

SPOT teams have identified about 100 people who were trying to smuggle drugs, use fake IDs and commit other crimes, but not terrorist acts.

Shoval, the Israeli entrepreneur, believes technology-based screening is the key to rolling out behavior-recognition techniques in the U.S. With experience in counter-terrorism service and the high-technology industry, Shoval developed his Cogito device with leading former Israeli intelligence officials, polygraph experts and computer-science academics.

Here is the Cogito concept: A passenger enters the booth, swipes his passport and responds in his choice of language to 15 to 20 questions generated by factors such as the location, and personal attributes like nationality, gender and age. The process takes as much as five minutes, after which the passenger is either cleared or interviewed further by a security officer.

At the heart of the system is proprietary software that draws on Israel’s extensive field experience with suicide bombers and security-related interrogations. The system aims to test the responses to words, in many languages, that trigger psycho-physiological responses among people with terrorist intent.

The technology isn’t geared toward detecting general nervousness: Shoval says terrorists often are trained to be cool and to conceal stress. Unlike a standard lie detector, the technology analyzes a person’s answers not only in relation to his other responses but also those of a broader peer group determined by a range of security considerations.

“We can recognize patterns for people with hostile agendas based on research with Palestinians, Israelis, Americans and other nationalities in Israel,” Shoval says. “We haven’t tried it with Chinese or Iraqis yet.”

The company’s goal is to prove it can catch at least 90 percent of potential saboteurs — a 10 percent false-negative rate — while inconveniencing just 4 percent of innocent travelers.

Sol-Gel raises \$7m

Israeli nanotechnology start-up Sol-Gel Technologies Ltd. has raised \$7 million in a financing round. Jerusalem Venture Partners (JVP) led the round, joined by existing investors. DSM Venturing, the corporate venturing unit of Royal DSM NV, a manufacturer of food additives and active pharmaceutical ingredients (APIs), also participated with a \$2 million investment. DSM added,

Sol-Gel’s technology improves the safety and effectiveness of APIs for drugs, sunscreens, and other products, such as pesticides. The company’s proprietary nanotechnology encapsulates APIs in micro and nano-sized glass (silica) matrices. Uses include light impenetrable sunscreens, which are used in products made by leading global cosmetics companies, including Estee Lauder. Sol-Gel recently developed an acne treatment with no side effects such as irritation or bacterial resistance.

JVP managing partner Erel Margalit said, “We believe that Sol-Gel will make a significant market breakthrough in the coming years, thanks to its proprietary technology. The company suits one of our most important investment channels - advanced materials and nanotechnology.”

L Capital invests \$17.5m in two start-ups

L Capital Partners, led by general partner Jonathan Leitersdorf, has invested \$10 million in Israeli start-up Hi-G-Tek Ltd., the fund’s third investment in Israel. Battelle Ventures also participated in the financing round. L Capital manages \$165 million and Battelle Ventures, a partner in US Department of Energy laboratories, manages \$150 million.

Hi-G-Tek develops active radio frequency ID (RFID) products that transmit cargo data. The company’s products enable the management of goods and assets in real time. The technology’s applications include securing logistics assets, protecting cargoes and containers, and monitoring transportation logistics. The products make it possible to monitor the location of cargoes and know their status in real time.

Hi-G-Tek is believed to have doubled its sales since 2003 to \$6 million this year.

L Capital Partners has also reportedly begun to invest in Aquarius Technologies Inc., which has closed a \$7.5

million financing round. The company was founded to market patent-protected technologies developed by Ariel-based Elif - Environmental Engineering Ltd. Elif has developed technologies for treating industrial and municipal waste and for purifying water with biological methods that do not create sludge. The treatments do not use chemicals.

Leitersdorf founded L Capital Partners in 2004. The fund invests in high-tech companies, especially in homeland security, life sciences, and the environment. The fund focuses on growing companies with expanding development and initial sales. The fund's portfolio currently includes ten companies. In addition to Leitersdorf, the fund's main investors are Bank Leumi (TASE: LUMI) and the US Small Business Administration (SBA).

BioLineRx In-Licenses Novel Antisense Drug for the Treatment of Inflammatory Diseases

-BioLineRx, Ltd. a drug development company, announced that it has signed an exclusive worldwide license agreement with B.G. Negev (BGN) Technologies Ltd., the technology transfer company of Ben-Gurion University of the Negev, and Mor Research Applications, Ltd., the Technology Transfer Office of Clalit Health Services for the development and commercialization of BL-3030, a novel antisense drug for the treatment of inflammatory diseases. BL-3030 was initially discovered by Professor Rachel Levy of Ben-Gurion University and Soroka University Medical Center in Beer Sheva, Israel. BioLineRx plans to develop the drug through its subsidiary BioLine Innovations Jerusalem, under the National Biotech Grant received in November 2004 from the Israeli Office of the Chief Scientist. BioLineRx anticipates an investment of approximately \$9 Million in order to achieve clinical proof of safety and efficacy for BL-3030. Financial terms of the agreement were not disclosed.

BL-3030 is an antisense oligonucleotide specifically designed to treat inflammatory diseases. The beneficial effects of inhibiting cPLA2 have been effectively demonstrated in a wide array of animal models of inflammatory diseases. Experiments conducted at Ben Gurion University showed that BL-3030 is effective in vitro in inhibiting both the amount and level of activity of cPLA2 in human cells, and in vivo in treating sterile peritonitis and RA. BioLineRx plans to conduct further optimization studies in the coming year, with IND-

focused preclinical activities for BL-3030 expected to begin in late 2007.

Currently, inflammatory diseases are treated either by non-steroidal anti-inflammatory drugs (NSAIDs), or by steroids. These drugs have either limited therapeutic benefit or severe side effects, which prevent long term use. BL-3030 is expected to be effective treatment for numerous inflammatory diseases currently treated with NSAID's and steroids, without causing the undesirable side effects.

Inflammation is a critical factor in numerous diseases affecting a significant part of the population worldwide. Rheumatoid arthritis, for example, is one of the most common and severe forms of arthritis. It is a chronic and often debilitating autoimmune disease in which the body's immune system attacks joint tissue, leading to pain, inflammation, deformity and disability that can be permanent. In the United States alone, over 2 million people suffer from RA and the total US market for rheumatoid arthritis therapeutic products forecasted for 2013 is \$ 9.5 billion.

BioLineRx is Israel's leading drug development company dedicated to building a robust pipeline of promising therapeutics for unmet medical needs. BioLineRx advances projects from early stage discovery and lead generation to advanced clinical trials, regulatory approval, and marketing. Partnering with researchers, universities and biotech companies to further the commercialization of promising compounds, BioLineRx seeks to enrich the pipeline of large pharmaceutical companies seeking their next blockbuster drugs. The Company was founded in 2003 by leaders in the Israeli life science arena including Teva Pharmaceuticals Ltd, Giza, Pitango, Hadasit and the Jerusalem Development Authority.

IAI publishes financials

Israel Aircraft Industries Ltd. (IAI) published its financial report for the first time in its history. The publication is part of the company's preparations for a bond offering of \$100-250 million scheduled for early 2007. IAI intends to use proceeds from the issue to make acquisitions and finance the early retirement of employees.

IAI posted \$1.3 billion in sales in the first half of 2006, 18% more than in the first half of 2005. Second quarter sales totaled \$713 million, 31% more than for the corresponding quarter of last year. Military sales, mostly to the domestic and Asian markets, accounted for 64% of total sales, after 15.8% growth compared with the corresponding period of last year. Civilian

sales, mostly in the US market, accounted for 36% of total sales.

IAI's revenue growth in the first half was reflected in its gross and operating profits. The company posted a gross profit margin of 13.4% of sales in the first half, compared with 12% in the first half of last year. Its operating profit was \$58 million, 107% more than in the corresponding period of last year, and its operating profit margin rose to 4.4% from 2.5%.

Despite the improvement, the company's profit margins were significantly lower than the industry norm. For example, Elbit Systems Ltd. (Nasdaq: ESLT; TASE: ESLT) posted gross profit margins double those of IAI's and, at 6-7% its operating profit margins were also significantly higher than IAI's.

IAI posted a net profit of \$48 million in the first half, after allocated \$26 million for early retirement for 150 employees, compared with \$25 million in the corresponding period of last year. On the other hand, IAI made a financing profit of \$16 million in the first half, mostly from financing profit from the company's cash and from \$5.7 million in securities.

One of the more significant figures in a financial report of a company like IAI is the orders backlog. IAI had an orders backlog of \$7 billion at the end of June, up from \$6.2 billion at the end of 2005.

Novel device for identifying explosives

An Israeli company called TraceGuard Technologies has pioneered a detection device it claims can identify explosives with unparalleled sensitivity, which could simplify airport baggage checks.

TraceGuard originally developed CompactSafe, a system geared at detecting traces of chemicals in electronic devices commonly used to conceal explosives, such as laptops, cameras or cellular phones.

In response to last month's security alerts however, a new device in development known as CarrySafe will be able to detect liquids in carry-on bags, which will be vital if baggage restrictions remain in place.

Unlike standard detectors, TraceGuard's technology can be placed alongside the X-ray scanners, removing the need for time-consuming swab tests and individual bag checks.

Dr Ehud Ganani, Chairman and Chief Executive Officer of TraceGuard, said that his firm was "committed to providing a unique solution to a complex and challenging security dilemma," confirming that the technology should be installed in a Tel Aviv checkpoint by December.

Airport authorities around the world will be watching the success of this pilot program eagerly.

Lucent to Buy Software Company Mobilitec

Telecom equipment maker Lucent Technologies Inc. said it agreed to buy Mobilitec, a provider of content management software, for an undisclosed cash amount.

Lucent, which itself has agreed to be acquired by French telecom equipment company Alcatel, said the deal strengthens its platforms supporting video, voice, data and multimedia applications, allowing more services for mobile and broadband users.

Privately held Mobilitec is based in San Mateo, Calif. The deal is expected to close by the end of the year. Alcatel's acquisition of Lucent is also set to close by year-end. The value of the deal is estimated at \$75m.

Mobilitec was founded in 2000 by Ophir Holder, Yoad Gidron, and Haim Teichholtz. Its headquarter are in California, and it has a development center in Israel. The company has developed a content platform via which mobile telephony operators sell integrated mobile content, including ring tones, games, music and videos. Its mPower platform works on a special global standard developed by Sun Microsystems for mobile handsets, J2ME. The standard enables the transmission of dynamic content to mobile handsets on demand.

Lucent has made several acquisitions in Israel, the largest of which was of Chromatis, which Lucent bought six years ago in a deal valued at \$4.8 billion at the time the agreement was signed. It eventually closed the company down.

L Capital invests \$17.5m in two start-ups

L Capital Partners, led by general partner Jonathan Leitersdorf, has invested \$10 million in Israeli start-up Hi-G-Tek Ltd., the fund's third investment in Israel. Battelle Ventures also participated in the financing

round. L Capital manages \$165 million and Battelle Ventures, a partner in US Department of Energy laboratories, manages \$150 million.

Hi-G-Tek develops active radio frequency ID (RFID) products that transmit cargo data. The company's products enable the management of goods and assets in real time. The technology's applications include securing logistics assets, protecting cargoes and containers, and monitoring transportation logistics. The products make it possible to monitor the location of cargoes and know their status in real time.

Hi-G-Tek is believed to have doubled its sales since 2003 to \$6 million this year.

L Capital Partners has also reportedly begun to invest in Aquarius Technologies Inc., which has closed a \$7.5 million financing round. The company was founded to market patent-protected technologies developed by Ariel-based Elif - Environmental Engineering Ltd. Elif has developed technologies for treating industrial and municipal waste and for purifying water with biological methods that do not create sludge. The treatments do not use chemicals.

Leitersdorf founded L Capital Partners in 2004. The fund invests in high-tech companies, especially in homeland security, life sciences, and the environment. The fund focuses on growing companies with expanding development and initial sales. The fund's portfolio currently includes ten companies. In addition to Leitersdorf, the fund's main investors are Bank Leumi (TASE: LUMI) and the US Small Business Administration (SBA).

C & S wholesalers deploy Retalix software

Reuters has reported that Retalix(R) (Nasdaq: RTLX), a provider of enterprise-wide software solutions for food retailers and distributors, announced that C&S Wholesale Grocers, Inc. is in the middle of a successful deployment of Retalix Supply Chain Management (SCM) Classic solutions across several of its grocery buying teams.

Plans are also being developed to implement several Retalix InSync modules including the Master Data Management (MDM) solution.

C&S is the second-largest grocery wholesaler in the U.S., with 2005 revenues of over \$15.2 billion. C&S

operates 63 distribution facilities across 14 U.S. states and is the wholesaler for a number of Retalix customers, including Bi Lo, Big Y, A&P and others.

Replacing several custom legacy mainframe applications, C&S is currently deploying Retalix supply chain management solutions for purchasing and invoice reconciliation. Twelve selection sites have gone live with Retalix purchasing and invoice reconciliation solutions over the past three months, making the C&S deployments one of the fastest ever for a Retalix customer.

An additional 19 selection facilities are expected to be converted to Retalix by end of the year.

Infinity to invest in Israeli-China deals

Infinity Venture Capital has opened a \$100-million to \$150-million fund to invest in Israeli companies doing business abroad, with 40 percent of the funds targeted to Israeli-related deals in China.

The rest of the fund will go to Israeli-related investments in India and Russia, said Amir Gal-Or, a managing partner in the Tel Aviv-based firm in an interview Monday.

Infinity invests in semiconductors, telecommunications software, medical devices, security, energy, and other sectors.

"We are unique from a few angles, and our strongest differentiation is our Asia strategy," he said. "We have the fund in China and we execute Israeli technology in Asian countries, mainly in China, Russia, and India. We do that by partnering with local partners."

One partner is the Chinese government. The firm has made four investments so far in China and has a team on the ground in Suzhou.

Warren Buffett visits Israel

Warren Buffett, who recently acquired ISCAR from the Wertheimer family came to Israel to view his acquisition.

Buffett said that this was his company's first investment outside the US and explained that this was the first time they had found a business that they really loved. Buffett promised that ISCAR would continue to operate in Israel and said that the last thing he wanted was to disturb ISCAR employees.



Iscar is located on Israel's northern border with Lebanon. Buffett pointed out that he invested in Iscar without ever having seen it. "We paid \$4.0 billion for a company we never saw. Now I am happy to report that there really is a factory there," quipped Buffett.

"My partner Charlie and I had the opportunity to see magic with our own eyes during our visit to Iscar," Buffett said. "We've seen thousands of companies and have never seen such a combination of enormous achievement, power, talent and imagination as we saw at Iscar, a company that grew out of nothing to become a supplier to international companies," Buffett said.

Bananas that defend themselves

An Israeli biotech company has developed banana plants that are completely resistant to pathogenic nematodes, which are parasitic organisms that normally damage the plants and their fruit.

Nematodes, commonly called roundworms, and are some of the most destructive pathogens damaging banana and plantain crops across the globe. Chemical nemacides have been banned in most of the world due to their dangerous toxic and carcinogenic nature.

Israel's Rahan Meristem biotechnology company has now developed banana plants resistant to nematodes, a development that will save banana growers the world over millions of dollars in lost crops.

Up to this point, improvement of banana strains has been slow due to the banana plant's natural sterility, but lengthy field testing and genetic modification have now yielded excellent results: plants immune to the parasitic organisms.

Kibbutz Rosh Hanikra, located on Israel's coastal border with Lebanon. Initially, Rahan's workers developed new procedures for large-scale propagation of over two hundred plant different kinds of plants, including ornamental, industrial, fruit and vegetable crops.

By the mid 1980's, the company focused on a smaller variety of plants, and in vitro propagated banana plants became the leading product. "Combined with the high level of pre-existing expertise of banana agrotechnology on Kibbutz Rosh Hanikra, Rahan became a center of research and consultation for the banana industry throughout the world," the company's web site claims.

The company currently employs 110 people, and aside from its main office in northern Israel, maintains agencies in Costa Rica, Brazil, Colombia, Serbia and Croatia.



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