

ISRAEL HIGH-TECH & INVESTMENT REPORT

A MONTHLY REPORT COVERING NEWS AND INVESTMENT OPPORTUNITIES
May/ 2014 Vol. XXIX Issue No.5

JOSEPH MORGENSTERN, PUBLISHER-
You are invited to visit us at our website: <http://ishitech.co.il>

Ofek 10 Launched Successfully

Israel launched the Ofek 10 spy satellite from the Palmachim base in central Israel. during the night. in the coming hours it became known that the launch was successful and that the satellite had moved into its correct orbit. The satellite was sent to space by the Shavit launcher, which is operated by two main motors manufactured by Israel Military Industries Ltd. (IMI).

Once the satellite is in orbit, it will undergo a series of tests designed to verify that it is fully operational and the level of performance is as required. The Ofek 10 contains the most advanced imaging equipment based on radar that can photograph at night and in any weather including the cloudiest conditions, and this distinguishes it from previous satellites. The launch was carried out by the Ministry of Defense and Israel Aerospace Industries Ltd. (IAI) (TASE: ARSP.B1).

This is the sixth spy satellite launched by Israel and it will allow Israel to conduct unlimited monitoring of developments throughout the Middle East and the world.

Ofek 10 joins Ofek 9 in space. Ofek 9, which was launched in June 2010, is an imaging and intelligence gathering satellite developed by IAI and costing \$300 million. Ofek 9 has sent back exceptional quality images and it is able to identify objects just dozens of centimeters in size. This is technology possessed by very few

countries around the world.

“We continue to increase the vast qualitative and technological advantage over our neighbors,” said Defense Minister Moshe Ya’alon at the launch at a test site in central Israel.

“Our ability to continuously reach new levels of accomplishment, as with this launch, is what

<http://ishitech.co.il>

Ofek 10 Launched Successfully
Palo Alto acquires Cyvera for \$200m.
Verint acquires UTX for \$83m
Verint acquires Kana Software for \$514m
Hebrew University researchers discover how tumors become resistant to drugs, and how process can be reversed to inhibit cancer growth
IDE wins award for Sorek desalination plant
Pratt & Whitney buys Israel’s Blades Technology

allows us to live a productive and prosperous life. Blessed is the state, and its people."But it functions in a fundamentally new way – instead of automatically sweeping through vast swathes of territory with its cameras, it can momentarily switch between different locations.

This is due to the fact that its operators can alter the orbit of the 330 kilogram satellite between 400 kilometers and 600 kilometers from the Earth's surface in its 90-minute circumnavigation of the planet, while zooming in to take high-resolution images of objects as small as 18 inches across.

"The satellite has exceptional photographic ability," said Ofer Doron, CEO of the Israel Aerospace Industries' Space Division, which was responsible for developing the satellite. "It's designed to deliver very precise, high quality images under all conditions."

Apart from Israel, other countries that operate surveillance satellites include the US, Russia, China, France, Italy, Britain, South Korea, India, Japan, Ukraine and Iran.

Of these nations, Iran poses the greatest threat to security in the eyes of Israeli officials, who have repeatedly insisted that Tehran is on the verge of developing a prototype nuclear weapon. Israel also says it plans to use the new satellite to monitor hostile militant groups, presumably such as Hamas and Hezbollah.

In fact, for security reasons, Israel launches its satellites to the west, and not to the east, sacrificing payload, but making sure that no technologically sensitive debris fall on the territory of its rivals, particularly if any satellite fails to reach orbit and plunges to Earth.

But Ofek 10 avoided this fate, and has already begun relaying visuals and information from orbit. It is expected to become fully operational within three months.

Palo Alto acquires Cyvera for \$200m

IT security company Palo Alto Networks Inc. (Nasdaq: PANW) announced that is acquiring Cyvera Ltd. for \$200 million, most of which is in shares. According to the filing with the US Securities and Exchange Commission (SEC), 56%, or \$112 million, of the acquisition is in Palo Alto shares, and the rest is in cash.

Palo Alto in advanced talks to buy Cyvera for \$200m

Although Palo Alto Networks was founded by an Israeli, Nir Zuk, who serves as its CTO, the acquisition will enable it to open its first development center in Israel.

Although this is not an especially big deal, it can be seen as representative of the current cyber market. Cyvera was founded less than three years ago, has almost no income, and raised some \$13 million, some of which is probably still in its reserves. Its main investors are Blumberg Capital and Battery Ventures, as well as stra-

Israel High-Tech & Investment Report

Published monthly since January 1985

Publisher and Editor in Chief

Joseph Morgenstern, B.A. Chem.

Technology Review Board

Prof. S.J. Joel-Cohen, MD, FRCS. FRCOG (1996-2002)

Prof. Hylton Miller, M.B. Ch.B.

Copy Chief

Debbie Mor

Web Master

Marty vonBokel

Graphics Consultant

Daniel Morgenstern

Subscription Inquiries

Tel-. +972-3-5235279 Fax. +972 3-5227799

E-mail: htir_1@netvision.net.il

Annual subscription \$95.- per year, for 11 issues,

Israeli residents add 17% VAT

Web Edition and Archives

<http://ishitech.co.il>

tegic investor EMC Corporation (NYSE: EMC). The most prominent private investors are Prof. Ehud Weinstein and Dr. Ofir Shalvi, two of the three founders of Anobit, which was sold to Apple Inc. (Nasdaq: APPL).

Cyvera was founded by co-CEOs Netanel Davidi and Uri Alter, and Moshe Ben-Abu. The company focuses on the hotter side of information security, advanced persistent threats (APT) or zero-day attacks. These are threats that are inserted into computers by countries or terrorist or criminal organizations, and are not usually identified by traditional information security systems.

Verint acquires UTX for \$83m

Verint Systems Inc. (Nasdaq: VRNT) has completed the acquisition of Israeli mobile device tracking solutions developer UTX Technologies Ltd. for \$82.9 million in cash, and up to \$1.5 million in milestone payments. The acquisition was financed from cash in hand.

Verint acquires Kana Software for \$514m **Wall Street**

Verint CEO Dan Bodner stated “We acquired UTX because we see many growth opportunities for this company. We expect its business to contribute \$10 million to our revenue this year and to double to \$20 million next year.” He added that the previous acquisition of Kana Software would contribute \$150 million to Verint’s revenue in 2014, and that without the acquisitions, Verint would have single-digit organic sales growth this year.

Verint also reported flat results for its 2013 fiscal year, which ended in January 2014. Net profit was unchanged at \$58.8 million (\$0.99) per share on \$907.3 million revenue, down slightly from \$910 million revenue in 2013. The company forecasts 19-24% revenue growth to \$1.08-1.13 billion revenue in fiscal year 2014 and earnings per share of \$3.20-3.40.

Mazor Robotics to unveil brain surgery system

Mazor Robotics Ltd. (Nasdaq: MZOR; TASE:MZOR) will

unveiled its new Renaissance Guidance System brain module at the American Association of Neurological Surgeons (AANS) annual meeting in San Francisco. The US Food and Drug Administration (FDA) has approved the Renaissance system for both spine and brain surgery.

The Renaissance brain module utilizes a small, frameless platform with only three points of fixation to provide highly accurate access to the areas of the brain where intervention is needed. This helps to minimize incisions and scarring while providing surgeons with a full 360 degree working volume to change trajectories with ease.

“We are very happy to see the benefits that Renaissance Brain Surgery is bringing to neurosurgeons and their patients,” said Mazor Robotics CEO Ori Hadomi. “After years of development, we are excited to introduce our technology to the brain surgery market and continue our efforts in this new arena.”

To date, Mazor Robotics Renaissance Guidance System has been used to place over 45,000 implants in thousands of spine procedures worldwide.

Israel launches Ofek 10 spy satellite

The sixth spy satellite launched by Israel will conduct unlimited monitoring of developments throughout the Middle East.

Hebrew University researchers discover how tumors become resistant to drugs, and how process can be reversed to inhibit cancer growth

Researchers at the Hebrew University of Jerusalem’s Faculty of Medicine have discovered a

process whereby tumor cells become resistant to specific drugs, a finding that could significantly influence how anti-cancer drugs are administered and the development of a means for reversing the proliferation of malignant tumor growth.

Cancer has become one of the major challenges of biomedical research in the past decades, and is one of the leading causes of illness and death all over the world. While many drugs have been developed against cancer, doctors do not know in advance of treatment whether a patient might benefit from a particular drug. Thus, being able to identify in laboratory testing whether a patient's tumor is either resistant or sensitive to a specific drug is crucial to enabling the rapidly developing field of "personalized medicine."

(L to R) Dr. Rotem Karni at the Hebrew University's Faculty of Medicine and graduate student Avi Maimon are making discoveries that will help in the fight against cancer. (Photo: Hebrew University of Jerusalem)

In a study published in the journal *Cell Reports*, conducted by Hebrew University graduate student Avi Maimon under the supervision of Dr. Rotem Karni of the Institute for Medical Research Israel-Canada at the Hebrew University of Jerusalem's Faculty of Medicine, researchers found that breast, lung and colon cancer cells change the structure of an enzyme called Mnk2, which is involved in the transmission of information from the environment/body into the cell.

The researchers showed that the enzyme Mnk2 has two forms: a "normal" form that inhibits cancer, and a form that promotes cancer development. Dr. Karni's team further showed that cancer cells change the structure of the Mnk2, so that they eliminate the form that inhibits cancer and elevate the form that induces it, thus allowing the cancer cells to survive and grow faster.

In addition, the researchers found that the anti-cancer form of the enzyme activates a suicide program in normal cells under stress conditions.

To counter this process, Dr. Karni and his colleagues developed molecules that can convert the cancerous form of the Mnk2 enzyme back into its normal form, so that they become sensitive to stress and to absorbing anti-cancer drugs.

"The mechanism we discovered explains how cancer cells eliminate the anti-cancer form of Mnk2 without changing their DNA, and how they become resistant to anti-cancer treatments — a problem which exists for almost every cancer treatment today," says Dr. Karni. "The new molecules we developed in order to change the structure of the Mnk2 enzyme back to its normal form will enable re-sensitizing cancer cells into anti-cancer therapies," he says.

This research could lead to development of a new biomarker for testing the sensitivity of a patient to specific drugs. According to Dr. Karni, the possibility of examining whether a patient will benefit from a specific drug treatment before the treatment starts is of primary medical interest. His research group is now developing a diagnostic test for the marker they found.

More importantly, the molecules developed by Dr. Karni that change the cancerous form of Mnk2 into the normal form will make it possible to overcome the drug-resistance of cancer cells, making them instead sensitive and responsive to various anti-cancer treatments. Further laboratory work on this aspect is also continuing.

These findings were recently submitted as patent applications by Yissum, the technology transfer company of the Hebrew University.

IDE wins award for Sorek desalination plant
Global Water Intelligence: IDE will remain at the

cutting edge of the desalination industry. IDE Technologies Ltd., a joint venture of Delek Group Ltd. (TASE: DLEKG) and Israel Chemicals Ltd. (TASE: ICL), has won awards for its Sorek desalination plant from British trade journal Global Water Intelligence. IDE's initiatives "will ensure that IDE remains at the cutting edge of the desalination industry for at least another four decades," says the award citation

The awards won by IDE included Desalination Company of the Year, and Desalination Plant of the Year, as well as Desalination Deal of the Year, which IDE won with its partners in 2013 for the Carlsbad Project, the largest seawater desalination plant in the western hemisphere. The Sorek facility, jointly built with Hutchison Water International Holdings Pte. Ltd., is the world's largest and most advanced seawater reverse osmosis (SWRO) desalination plant. IDE says that the award recognizes the plant as the most impressive technical and ecologically sustainable achievement in the industry.

The Sorek plant provides clean water for more than 1.5 million people, or 20% of Israel's municipal water demand. "In a revolutionary departure from other large-scale SWRO facilities, the Sorek plant employs 16-inch membranes in a vertical arrangement. This innovation reduces the number of elements, pressure vessels and piping headers required [and] allows fast installation and increased accessibility," states Global Water Intelligence. "Smart design and construction within the boundaries of a uniquely challenging site footprint has enabled the plant to be environmentally sensitive, despite its gargantuan size, with no shoreline impacts due to underground pipe-jacking technique." IDE completed the 150-million cubic meter a year Sorek plant in 2013, as well as a 70-million cubic meter a year plant at the Tianjin SDIC power station in China, and a 21.9-million cubic meter a year plant at the Vasilikos power plant in Cyprus. It has also begun construction of

74.6 million cubic meter a year Carlsbad plant in San Diego, under a 30-year BOT contract. In addition, Reliance Industries Ltd. chose IDE's SWRO solution to expand India's largest desalination plant, and Mulpha Australia selected the IDE ProGreen chemical-free, modular RO 'plant in a box' to provide high-quality clean water to its Hayman Island resort. The company has strategic partnership with Beijing Enterprises Group and set up a research partnership Clean Harbors to increase the reliability of Mechanical Vapor Compression (MVC) evaporators to treat oil sands produced water in Canada.

Hyperion acquires Andromeda for up to \$570m pharmaceuticals

The Clal Biotechnology subsidiary has an immune intervention therapy for Type 1 diabetes in a Phase III clinical trial.

Clal Biotechnology Industries Ltd. (TASE: CBI) has sold subsidiary Andromeda Biotech Ltd. to Hyperion Therapeutics Inc. (Nasdaq: HPTX) for \$20 million in cash and shares and up to \$550 million in regulatory and commercial milestone payments. Andromeda's DiaPep277 is an immune intervention therapy for Type 1 (juvenile) diabetes. The drug is undergoing a Phase III clinical trial on adult patients, with results due in the first quarter of 2015.

Clal Biotech selling diabetes treatment co Andromeda

Teva sells Andromeda diabetes treatment stake

At the closing, Hyperion will pay \$12.5 million in cash and \$7.85 million in shares. It will pay up to \$120 million in global regulatory milestones, initially in the US or Europe; and up to \$430 million in commercial milestones, the first of which is \$450 million in global annual net sales; and contingent sales payments ranging from 10%

on annual worldwide net sales up to \$300 million to 17% for annual worldwide net sales that exceed \$1.2 billion, with the exception of sales by distributors in certain territories, for which the rate is 25%.

“The acquisition of Andromeda Biotech is a transformative event for Hyperion,” said Hyperion president and CEO Donald Santel. “We believe DiaPep277 has the potential to become a highly differentiated, first-in-class medicine for an orphan indication with a significant unmet need. With the successful commercialization of Ravicti well under way, DiaPep277 adds an attractive late-stage asset to our portfolio, while we continue development of glycerol phenylbutyrate for hepatic encephalopathy.”

Andromeda Biotech CEO Shlomo Dagan said, “If the second Phase 3 study is positive, DiaPep277 could play an important role in immune intervention of Type 1 diabetes, as patients who have even modest preservation of pancreatic beta cell activity could achieve better control of their blood sugar and a reduced risk of long-term diabetes complications.”

How an Israeli Rock Star Got Bob Dylan and Silicon Valley to Dig His Tech Startup

Yonni Bloch’s latest project began with a flash of inspiration in the recording studio. Bloch, an Israeli rock star and former host of the local version of “American Idol,” couldn’t come to an agreement with his band mates over who would get to play a particular solo.

“In the middle of the argument, we said, ‘You know what? Let’s just record all the solos and see what people choose,’” he says.

To make that happen, Bloch, 32, swapped his guitar for a laptop. He and his fellow musicians formed Interlude, a technology company that

lets fans instantly remix songs and videos. Their startup helps musicians, directors and advertisers create interactive videos that allow Web watchers to switch between various scenes with the tap of a button.

Interlude’s best-known project is an interactive music video for “Like a Rolling Stone,” which singer Bob Dylan commissioned last year. The video lets viewers flip through 16 mock television channels, using the up and down arrows on the keyboard, where different characters are shown lip-syncing the classic Dylan hit. Fans tuned in more than 70 million times to create their own custom videos. Bloch, Interlude’s chief executive officer, told Bloomberg Television that the Dylan video contains “billions of different combinations.”

This Crazy Technology Would Scan Your Skeleton At The Airport To Determine If You Are A Threat

Skeleton Scanning

An Israeli video-technology firm called Extreme Reality is working on a skeletal scanning system that could help airports analyse and identify potentially threatening people passing through security, according to David Shamah with The Times of Israel.

The biometric system scans a body to detect its movements and compares them with a “skeletal map.”

Similar biometric authentication systems exist in airports around the world, but mainly for frequent travellers to speed up their security process. The way this works, however, is that these travellers register their biometric profile so that it can be saved in a database. Trying to get all travellers around the world to register their biometric profile would no doubt be a nightmare.

Enter Extreme Reality who has a different idea of how to leverage biometric authentication.

They're using a standard 2-D surveillance camera to analyse a person's motions and create a "skeletal map," which shows the distance between joints and how they move. By comparing this map with future scans, Extreme Reality can detect any differences in movements that might indicate signs of stress or other red flags. The system uses complex algorithms to detect these differences, and according to Extreme Reality, it is more than 90% accurate.

"By analysing the body motion, we can understand if you're doing something you're not supposed to be doing," Extreme Reality CEO Dor Givon told Times of Israel.

Using such a system, airports would not have to register travellers, they could simply scan them once and automatically enter it into a database. This would, of course, leave room for possible danger after a traveller's first scan, since there would be nothing to compare it against. But eventually this could lead to a secure authentication process.

A Comprehensive Guide to Israel's Biotech Industry

Blockbuster prescription drugs sold worldwide that treat multiple sclerosis, cancer, Alzheimer's and Parkinson's diseases derive from Israeli biotechnology. Israel creates more medical devices per capita than any other country, and its life sciences exports earn more than \$3 billion a year.

Israeli research is at the forefront of the emerging fields of stem-cell therapy and genomics, and two Israelis were awarded Nobel Prizes in Chemistry, the first to Profs. Avram Hershko and Aaron Ciechanover of the Technion-Israel Institute of Technology, and the second to Prof. Ada Yonath of the Weizmann Institute of Science number among the many awards bestowed on the country's biotech scientists.

The pace of innovation, development and growth in Israel's biotechnology sector is unparalleled. Israel's biotech industry is the most aggressive in the world, with more startups per capita than any other country. Its 180 biotech companies – each built on a combination of academic excellence, a highly-skilled workforce, cutting-edge technological inventiveness and entrepreneurial daring – are creating therapeutic products, diagnostic tools and revolutionary drug-delivery techniques benefiting people all over the world.

Tailor-made for Israel

Biotechnology, the science which applies breakthroughs in molecular biology and immunochemistry to diagnosis and therapy, was born in the late 1970s. In many ways, it is tailor-made for Israel, being rooted in innovation and perseverance; a highly educated workforce; the lessons of military service; intimate links between researchers and entrepreneurs; and US capital and markets and, particularly, the US 1985 free trade agreement with Israel.

Innovation and perseverance: A small country with a population of only seven million and few natural resources, Israel's economy is necessarily one of innovation and perseverance. Demanding conditions – first in agriculture, then in defense and from there throughout its economy – set the stage for dramatic economic growth, as Israel transformed itself from a developing to a developed nation, and from an economy based on agriculture to one based on knowledge.

A highly educated workforce: With seven world-class universities, Israel is one of the most highly educated countries on the globe. Almost a quarter of its workforce has university degrees, and 12 percent of these have advanced degrees. Among the 750,000 people who immigrated to Israel from the Former Soviet Union between 1989 and 1991 were hundreds of highly skilled

engineers. They have enhanced Israel's technological talent-pool, giving the country the world's highest rate of scientists per capita (one in 200), 39 percent of whom specialize in life sciences.

The lessons of military service: Mandatory military service in Israel equips its young people with the connections, management skills and action-oriented entrepreneurial mindset critical for technological development.

Intimate links between researchers and entrepreneurs: Israeli universities were among the first worldwide to develop technology transfer organizations – professional companies tasked with helping Israeli researchers to commercialize their academic research by connecting them with national and multi-national companies.

US capital and markets and, particularly, its 1985 free trade agreement with Israel: The US as a trading partner helped fuel the high-tech boom of the 1980s and 1990s, which, in turn, created the conditions for Israel's biotechnology cluster.

Birth of biotech in Israel

Israel whimsically dates the birth of its biotechnology industry to 1936. This was when chemist Chaim Weizmann, later to be the country's first president, developed a process that produced acetone from the bacterium *Clostridium acetobutylicum*. It took almost six more decades, however, until the modern Israeli biotechnology industry was born, on the heels of the high-tech boom.

While Israeli biotechnology embraces the whole biotech sphere – from animal vaccines and diagnostics to plant tissue culture, bioreactors, seeds, diagnostics and biopesticides – its emphasis is firmly on medical agents, diagnostics and cell- and tissue-therapies. Some 60 percent of Israeli biotech focuses on human

therapeutics, including drug discovery, cell therapy and genetics. A further 20% of Israeli biotech companies produce diagnostic kits.

Top-selling prescription drugs based on Israeli research

The best-known and most successful medication developed in Israel is Copaxone®, a breakthrough treatment that significantly reduces the severity of clinical episodes in multiple sclerosis patients also making them less frequent. Developed by Teva Pharmaceutical Industries and the Weizmann Institute of Science, it is the world's leading MS therapy, approved in 52 countries, with global sales reaching \$2.8 billion in 2009.

Teva's first proprietary drug, Copaxone®, is today responsible for a third of the company's profits. Teva is one of the 15 biggest international pharma companies in the world and one of the largest generic drug manufacturers. The company employs more than 35,000 people in 50 countries, and earned almost \$14 billion in 2009. It is increasingly expanding into cutting-edge patentable therapies.

Azilect® (rasagiline) is another Teva product. Based on research at the Technion Institute of Technology, it combats Parkinson's disease, both as initial therapy and, later in the disease, in conjunction with L-dopa. Its 2009 sales reached \$175 million.

Exelon® is a medication for Alzheimer's disease that reduces symptoms, enabling patients to remain independent and 'themselves' for longer. Originating in research at the Hebrew University and developed and commercialized by Novartis, its global sales in 2009 were more than \$954 million.

Doxil® is a chemotherapy agent used in treating different types of leukemia, Hodgkin's lymphoma, multiple myeloma and cancers of the bladder, breast, stomach, lung, ovaries and

thyroid. Based on research at the Hadassah Medical Center, it was sold to Johnson & Johnson, and recorded global sales of \$430 million in 2009.

Regenerative Medicine

Scientific regulation in Israel is enforced by Judaism's emphasis on the saving of life. The country's relatively liberal approach to stem cell research for therapeutic purposes derives from this tradition, which has positioned Israeli scientists among stem-cell research's pioneers and kept them at the heart of the regenerative medicine map, helped by a government-sponsored research consortium spanning academia and industry. While no stem-cell medication yet exists anywhere, several are on the way from Israeli companies.

The four-year-old Jerusalem start-up Cellcure Neurosciences is starting clinical trials in patients with age-related macular degeneration (AMD), the leading cause of blindness in over-50s in the Western world, which is estimated to affect some 30 million people.

The disease is caused by the dysfunction, degeneration and death of pigment-including retina cells, which lie between the retina's photoreceptors and the nourishing blood vessels at the back of the eye. Cellcure creates healthy retinal pigment cells from human embryonic stem cells, and injects them into the eye to replace the dying cells.

Jerusalem-based Gamida Cell has developed stem cells from umbilical cord-blood to treat blood cancers, autoimmune diseases, metabolic disorders and the hematological disease neutropenia. Its lead product is StemEx, which was given FDA Fast Track Designation in mid-2010. It is now being tested in international Phase III clinical trials as an alternative to bone marrow transplant in patients with advanced blood cancers, who are unable to find a matched donor.

BrainStorm Cell Therapeutics in Petah Tikva is a leading developer of adult stem cell technology and therapy. It has created a stem cell treatment for patients with amyotrophic lateral sclerosis (ALS or Lou Gehrig's disease) and Parkinson's disease based on autologous bone-marrow-derived adult stem-cells. In a first clinical trial, conducted at the Hadassah Medical Center, ALS patients will be re-implanted with stem cells taken from their own pelvis.

Drugs derived from living cells

Uplyso, a medicine for Gaucher's disease based on the enzyme taliglucerase alfa, is an example of the ongoing push into biologics – drugs derived from living cells rather than from chemicals. It was developed by Protalix Biotherapeutics, a company that began life in 1994 within Israel's Meytav Technological Incubator, graduating to become an independent publicly held company with a market capitalization of more than \$700 million, trading on both the NYSE Amex Exchange and the Tel Aviv Stock Exchange.

It recently sold the rights to this experimental Gaucher's medication for \$60 million to the New York-based Pfizer, the world's largest-selling pharmaceutical firm.

IVC: Israeli start-ups raising record amounts dollars

The \$643 million raised in the first quarter was the second highest quarterly amount ever raised.

Although Israeli high-tech start-ups raised less money in the first quarter of 2014 than in the preceding quarter, the \$643 million raised by 160 companies was the second highest quarterly amount ever raised, exceeded only by the \$801 million raised in the fourth quarter of 2013, IVC Research Center and KPMG Israel Somekh Chaikin announced today. Capital raised in the

first quarter was 53% more than the \$439 million raised in the corresponding quarter of 2013.

“The bullish US capital market and capital raising for technology companies via IPOs on Nasdaq in the last 12 months have been drivers of venture capital, both globally and in Israel. Venture-backed revenue stage growth companies are raising substantially higher amounts of capital on average than in the past, positioning themselves for continued market expansion and significant acquisition and/or Nasdaq IPO,” said KPMG Somekh Chaikin Technology Group partner Ofer Sela. “This is an indicator of the maturity of the Israeli technology market and signifies that Israeli VC-backed companies are market leaders, providing more than just a ‘great technology solution.’ These later stage rounds are being led by investors who tend not to be venture capital investors. They are bestowing significantly higher valuations and lower risk to deals, similar to the private equity industry.”

The decline in investments by Israeli venture capital funds continued in the first quarter, amounting to \$106 million, the lowest quarterly share - 16% - on record, and down 25% from the preceding quarter and 33% from the corresponding quarter.

“This is the third quarter in a row that capital raising exceeded \$650 million. These are great figures that show a sustained, positive momentum for the Israeli high-tech industry,” said IVC Research Center Koby Simana. “At the same time, high-tech’s success is clouded by the weakness of local venture capital funds, with investments continuing to shrink from quarter to quarter.” He added, “While foreign VC participation in Israel is a positive development for the high-tech industry, it is important to understand that at the core of the process lies a clear food chain. Without funds raised by local VCs, there won’t be sufficient capital for early stage invest-

ments. Without early stage financing, there won’t be late stage investments. Therefore, it is critical to understand that prolonged absence of Israeli VC funds threatens high-tech industry growth in the longer run.”

Internet start-ups raised the most capital in the first quarter, \$260 million, or 39% of the total - the highest amount and share by the sector since 2000. Software companies were in second place, despite the steady drop in their share of total capital raised to 21% in the first quarter from 23% in the preceding quarter and 31% in the corresponding quarter.

Late-stage companies raised \$227 million in the first quarter, 34% of the total raised, mid-stage companies raised \$221 million, and seed-stage companies accounted for 6%. D-Pharm, created in 1993 in Ness Ziona, is a biopharmaceutical company that has created a new class of therapeutics to treat devastating brain disorders. Its proprietary technology re-engineers existing drugs, modifying them to work more efficiently and with fewer side effects. A mid-stage trial of its neuroprotective DP-b99 doubled the number of patients who completely recovered from strokes caused by blood clots.

The company hopes to bring it to market by 2013. D-Pharm is also making good progress with a medication for epilepsy, bipolar disorder and migraine prophylaxis.

Computational Biotechnology

Computational biotech, also called bioinformatics, is the specialty of Compugen, a company founded in Tel Aviv in 1993 by three former IDF intelligence officers. Its technologies incorporate methods from mathematics, computer science and physics into biology, organic chemistry and medicine to help scientists gather and process vast amounts of data.

The result is powerful predictive models and discovery engines, which advance understanding of biological phenomena and enable discovery of potential therapeutic products and diagnostic markers. Compugen's customers include the pharmaceutical concerns Eli Lilly, Merck, SmithKline Beecham Pharmaceuticals, Novartis and Millennium Pharmaceuticals.

Genomics

Genomics uses the RNA system within living cells to control which genes are active and how active they are. Rosetta Genomics, based in Rehovot, is using RNA-based technology to develop a wide range of diagnostic tests for cancers and women's health indications.

Quark Pharmaceuticals has created a fully-integrated drug development platform to deliver RNA molecules to the eye, ear, kidney, lung, spinal cord and bone marrow, where they can block the action of faulty genes.

Diagnostics

Diagnostics, particularly monoclonal antibody-based test kits, were among Israel's first commercial biotechnology successes. Aided by Israel's vast clinical medicine resources, new diagnostic tests are brought rapidly from the lab into the hospital ward and to market. Savyon Diagnostics was an earlier entry in this field in 1983, when Ben-Gurion University researchers developed a serological diagnostic kit to test for the sexually transmitted disease Chlamydia ('clap').

They formed the company a year later, and brought their test-kit to market in 1989. Savyon has gone on to develop and market tests for urinary tract infections and for HIV.

Organics, founded in 1983, produces 22 patented easy-to-use, stand-alone, ELISA-based ImmunoComb kits that test for Chlamydia, hepatitis A and B, cytomegalovirus, toxoplas-

mosis, rubella, Helicobacter pylori and AIDS, as well as non-wipe strips for measuring blood glucose levels.

Zer Science-Based Industries specializes in diagnostic tests related to fertility. Its Single-Step pregnancy test requires just drops of urine to give an accurate result within five minutes, even before the first missed menstrual period.

Future blockbusters

One example among many is Glassia, the first and only high purity, liquid, ready-to-use 1-proteinase inhibitor for adults with inherited emphysema resulting from 1-antitrypsin deficiency.

Kamada, the 20-year-old biopharmaceutical concern that invented Glassia, entered an exclusive distribution and manufacturing agreement for its production in mid-2010 with the global health-care company Baxter International.

V Wave heart device implanted in first patient

V Wave has developed a shunt for the treatment of congestive heart failure.

V Wave Ltd., which has developed an implantable shunt for the treatment of congestive heart failure, implanted its first shunt in a patient a few weeks ago. The company, founded in 2009, has developed a miniature shunt, which is implanted by catheterization into the left ventricle, to reduce the pressure on the muscle controlling the blood flow between the heart chambers in patients who are frequently hospitalized with heart attacks.

Pratt & Whitney buys Israel's Blades Technology

The Wertheimer family has sold the Nahariya-based jet compressor and turbine blades company.

The \$643 million raised in the first quarter was the second highest quarterly amount ever raised.

Although Israeli high-tech start-ups raised less money in the first quarter of 2014 than in the preceding company, the \$643 million raised by 160 companies was the second highest quarterly amount ever raised, exceeded only by the \$801 million raised in the fourth quarter of 2013, IVC Research Center and KPMG Israel Somekh Chaikin announced today. Capital raised in the first quarter was 53% more than the \$439 million raised in the corresponding quarter of 2013.

"The bullish US capital market and capital raising for technology companies via IPOs on Nasdaq in the last 12 months have been drivers of venture capital, both globally and in Israel. Venture-backed revenue stage growth companies are raising substantially higher amounts of capital on average than in the past, positioning themselves for continued market expansion and significant acquisition and/or Nasdaq IPO," said KPMG Somekh Chaikin Technology Group partner Ofer Sela. "This is an indicator of the maturity of the Israeli technology market and signifies that Israeli VC-backed companies are market leaders, providing more than just a 'great technology solution.' These later stage rounds are being led by investors who tend not to be venture capital investors. They are bestowing significantly higher valuations and lower risk to deals, similar to the private equity industry."

The decline in investments by Israeli venture capital funds continued in the first quarter, amounting to \$106 million, the lowest quarterly share - 16% - on record, and down 25% from the preceding quarter and 33% from the corresponding quarter.

The Wertheimer family has sold its 51% stake in Blades Technology International Inc. to US jet engine maker Pratt & Whitney, a unit of United Technologies Corporation (NYSE: UTX), which already owns the other 49%. The terms and price of the transaction were not disclosed but estimates are that it is for hundreds of millions of shekels.

Stef Wertheimer founded Blades Technology as Iscar Blades in 1968, after France imposed an arms embargo in the wake of the Six-Day War, leaving Israel Air Force's mainly French combat aircraft without spare parts. It was a sister company of Iscar Ltd., which Wertheimer sold to Warren Buffet's Berkshire Hathaway Inc. (NYSE: BRK.A). The company, which was founded to supply the Israeli Air Force with spare parts is now a multinational that provides high quality components to major OEMs around the world.

Blades Technology International's units include Blades Technology Ltd. and Techjet Aerofoils Ltd. in Israel, Precision Component Inc. Georgia, and Xian Aero Technology Ltd. in China. Blades Technology manufactures 35-40% of all compressor and turbine blades and vanes for jet engines and industrial gas turbines in the world at its plant in Nahariya. According to BDI, its turnover in 2012 was some NIS 1 billion, and it has about 2,600 employees.

2,000 of them in Israel. Among its customers are jet engine manufacturers such as Rolls Royce, GE, Samsung, and others.

Walla has sold the classified ads website for a handsome profit.

Bezeq Israeli Telecommunication Co. Ltd. (TASE: BEZQ) unit Walla Communications Ltd. has sold its 100% stake in Coral Tell Internet Services Ltd., the parent company of classified ads website Yad2, to Axel Springer Digital Classified Ltd., which is jointly owned by German media magnate Axel Springer and General Atlantic Fund. The deal is worth NIS 787.5 million, and will rise to NIS 806.3 million, after

adjustments.

Axel Springer makes offer for Yad2

Yad 2 top site by far among apartment seekers

There were several other offers on the table for Yad2 but Walla decided to close the deal with Axel Springer which was the first company “to put the check on the table.”

The biggest winner from the deal is Bezeq, which will report a profit of NIS 560 million before tax from the deal, while the government can expect a tax windfall.

A senior Bezeq source told “Globes” that there was no synergy between Bezeq, which wants to focus on producing content, and Yad2, and the telecom company therefore decided to sell.

Walla completed the full acquisition of Yad2 only four months ago. It reportedly paid NIS 75 million to exercise its contractual right to acquire 25% of Coral-Tell, giving Yad2 a value of NIS 300 million. Walla originally acquired control of Yad2 for NIS 117 million, giving it a value of NIS 156 million, in July 2010.

Tamar partners sign deal with Union Fenosa Tamar gas drilling

The Tamar partners have signed a non-binding letter-of-intent to sell gas worth \$19.5 billion to the Spanish company.

The Tamar partners will sell natural gas to the Spanish company Union Fenosa Gas SA, which owns a gas export installation in Egypt, according to a non-binding letter of intent signed by both parties. The Tamar partners announced that they are targeting a binding agreement within six months. The deal will be worth \$1.3 billion annually over 15 years for a total of \$19.5 billion.

The Tamar partners initially reported the talks

with Union Fenosa in their 2013 annual statements.

The Tamar natural gas field partners are Noble Energy Inc. (NYSE: NBL) (36%), Delek Group Ltd. (TASE: DLEKG) units Avner Oil and Gas LP (TASE: AVNR.L) (15.65%) and Delek Drilling Limited Partnership (TASE: DEDR.L) (15.65%), Isramco Ltd. (Nasdaq: ISRL; TASE: ISRA.L) and Alon Natural Gas Exploration Ltd. (TASE: ALGS) (4%).

Under the terms of the agreement, the gas will be supplied to the Israel Egyptian border from where it will be linked up to Union Fenosa’s gas export installation in Egyptian waters. The price for the natural gas sold will be similar to the contract price in other natural gas sales and purchase agreements for regional export sales from Israel and is based mainly on a linkage to Brent oil prices.

Noble Energy Senior VP Eastern Mediterranean Keith Elliott said “This LOI with Union Fenosa Gas represents a major milestone for our Tamar asset and is indicative of the strong regional demand for natural gas. The associated expansion of the Tamar field facilities, subject to final investment decision of the Tamar partners, will not only enable substantial regional exports, but it will also increase the capacity for natural gas deliveries to Israel’s domestic market.”

He added, “Building on the recent agreements with the Palestinian Power Generation Company, as well as the Arab Potash and Jordan Bromine Companies, this agreement continues to demonstrate our ability to accelerate value and strengthen economic growth for stakeholders across the Eastern Mediterranean region.”

The Tamar field including SW Tamar contains 10 trillion cubic feet (TCF) of gas and this deal encompasses a total of 2.5 TCF.

The signing of the letter-of-intent comes several days before Delek Drilling, Avner and Alon Natural Gas attempt to raise \$2 billion in a bond from Israeli, US, and European institutional investors to recycle current debt and partly finance development of the Leviathan field.

The OECD warns on overheating in Israel's real estate market.

The OECD has again cut its global growth forecast, and expects the global economy to grow in 2014 at a rate of 3.4%, before a slight acceleration in 2015, when the global economy is expected to grow by 3.9%.

Average Israeli income tax rate among lowest in OECD

Israel ranked 23 in OECD in purchasing power

The OECD forecasts 3.2% growth in 2014. "The growth slowdown in late 2013, attributable in part to an appreciating exchange rate and budget tightening, is expected to be only temporary. The economy will be buoyed by a gradually improving external environment, the benefit of which should be amplified by expanding gas production and persistently low interest rates.

"With growth picking up to 3.5% in 2015, unemployment should remain at a low level. Absent any inflationary strains, an accommodative monetary policy is still needed to sustain demand and moderate the impacts of currency appreciation and budget deficit reduction."

"But," the report warned, "the risks of overheating in the real estate market remain considerable. Fiscal consolidation should continue, barring a significant slowdown in activity. However, this process should rely more heavily on boosting revenue, including a streamlining and

reduction of certain tax exemptions."

AOL acquires Convertro for \$101m
AOL

Convertro, which maximizes returns on ad expenditure, has a development center in Ra'anana.

AOL Inc. (NYSE: AOL) has announced the acquisition of Coverto for \$101 million. Headquartered in Santa Monica California, the company has a development center in Ra'anana with 15 employees.

creative and audience segment using unique algorithms. The acquisition will create synergy with Adap.tv, the US-Israeli company founded by Amir Ashkenazi tha



Please enroll me as a subscriber to the Israel High-Tech & Investment Report.

I understand that if not satisfied, I may cancel my subscription at any time and receive a refund of the unexpired portion. I enclose a check for \$95 (or the Israeli shekel equivalent and 18% v.a.t.) and am sending it to POB 33633, Tel--Aviv 61336.

I am providing you with my name, title, mailing address, e-mail, tele