

ISRAEL HIGH-TECH & INVESTMENT REPORT

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JOSEPH MORGENSTERN, EDITOR

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Israeli Know-how and Japanese Manufacturing

Prime Minister Yitzhak Rabin's mid-December meeting with the Emperor of Japan marked a milestone in relations between the two countries. Now that the Peace Agreement in Oslo has taken the teeth out of the Arab boycott of Israel, more Japanese businessmen and politicians are getting to know their counterparts in this country. While Rabin was in Tokyo, two agreements were signed, one dealing with cultural exchanges and one in the field of science and technology.

The era of peace is likely to change not only the amount, but also the nature of business between the two countries. Up until now, Japan has been Israel's second-largest buyer of manufactured goods and diamonds. In 1993, diamonds accounted for 70% of the total, but as Israel's exports to Japan grew by 18% (to \$682 million) in the first nine months of 1994, diamonds accounted for just 50%.

On the other side of the ledger, Japanese exports to Israel have declined by 14%, to \$692 million. Yet trade could grow rapidly as more and more Japanese discover this country's fruits and flowers. Israeli pomellas - a grapefruit-like citrus fruit - have caught on in Japan, and off-season flowers are also in demand. Israeli flower and fruit exporters are expected to continue their recent 20% growth.

Yet the Japanese are more famous for their fabulous manufacturing skills than for their esthetics or discriminating palettes. What are the opportunities for the Israeli high-tech sector?

Prior to the Oslo Accord, food snacks based on algae grown in Israel by a Japanese multi-national were selling well throughout Japan. The tasty snacks contain beta carotene, a substance which, according to pharmacopoeia, is said to retard the onset of cancer. This is only one example of a successful Japanese investment in Israel. Also, the Scitex Corporation, with its computerized graphics systems has long been active in the Japanese market.

But these are just promises of things to come. What will the future hold for these two countries - one famous for its "problem solving" ingenuity, the other

for its ability to combine such ingenuity with a superb quality of mass manufacturing and adroit marketing? Many are coming to feel that the 21st Century could witness a marriage made in business heaven.

The time is right. The number of Japanese business visitors to Israel is growing, and Israeli businessmen are beginning to visit Japan. The Japanese have expressed approval when exposed to Israel's infrastructure and high-tech sector, especially in biotechnology. The next stage in the courtship will depend on matchmaking by private enterprise in both countries. Good bi-national relationships will act as a catalyst.

At the moment, Israelis remain intent on selling their products and systems in the fields of electronics, medical technology, pharmaceuticals and biotechnology. The country is export oriented, and promotes sales aggressively - a natural drive for any business community which has turned its own ideas into products. But the Japanese, being long on manufacturing skills and efficiency, prefer to obtain Israeli know-how and manufacture back home. These traits can be synergized by the proliferation of joint ventures.

But let's make haste slowly, with patience. Both sides - each a synthesis of ancient values with modern culture - will require time to appreciate each other's personal and business characteristics.

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PenduLaser

The word "laser" stands for "Light Amplification by Stimulated Emission of Radiation". A laser is a device capable of generating a "coherent" beam of light, essentially of a single wavelength and uniform direction. These properties mean that a focused laser beam can concentrate an extraordinary amount of precisely controlled energy on a tiny area. As a result, a laser of the proper wavelength may be used as a "light scalpel" for the cutting, vaporization and coagulation of tissues.

One of the most common "light scalpels" is the carbon dioxide laser. This tool has been successfully applied in ear, nose and throat surgery, gynecology, dermatology, neurosurgery, general surgery, burn treatment, head and neck surgery as well as plastic and reconstructive surgery.

What marks an Israeli starting point for this high tech industry? A meeting of minds between Alex Harel (a former air force officer) and Prof. Isaac Kaplan, an innovator in CO₂ laser surgery with 40 years of operating experience. Prof. Kaplan's unshakable belief that the market would welcome a compact, state-of-the-art, reasonably priced laser for use in medical clinics or dental offices led to the founding of Optomedic Medical Technologies. Harel is president and chief executive of this fast-moving 18-month-old startup which produces unique medical lasers.

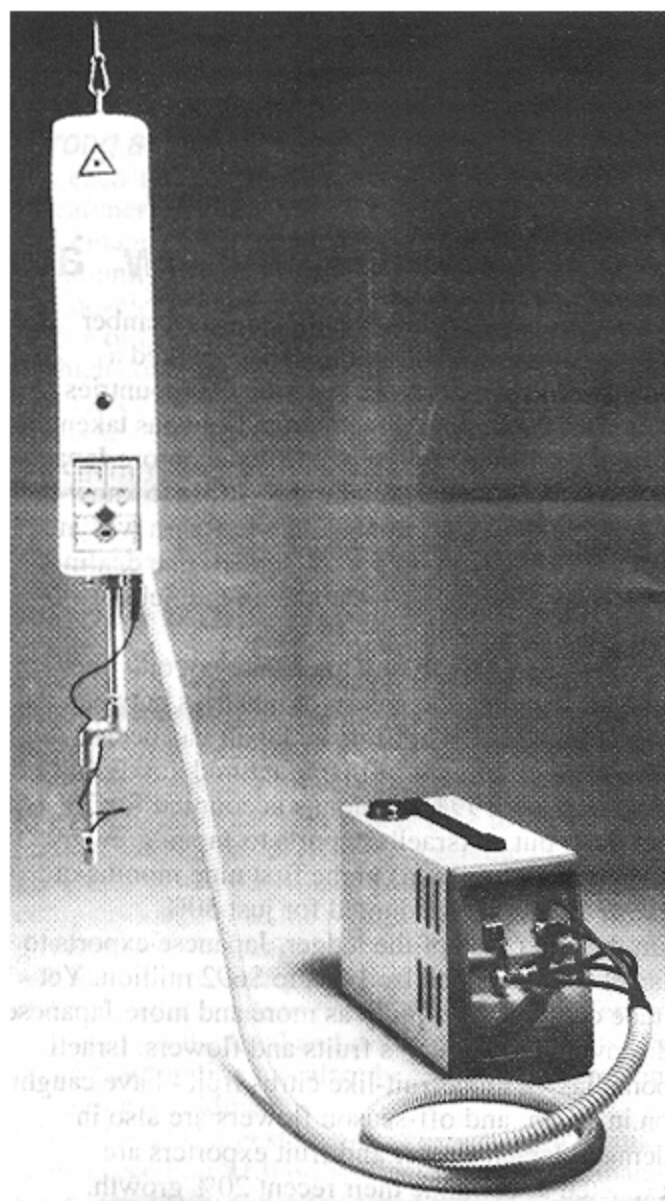
Between 1973 and 1991, Harel served in the Israeli Air Force, beginning as a course commander in the IAF Flying School, moving up to squadron commander at the Tel-Nof air base until his retirement from the Air Force as head of its total quality management program. He subsequently entered industry and in 1993, with Kaplan established Optomedic to design, develop and market a CO₂ surgical laser. It was to be unlike others in the market, conforming to Isaac Kaplan's idea of what a new-generation laser should be.

From concept to workable system

Isaac Kaplan is a Professor of Surgery and Plastic Surgery, and a past incumbent of the Chair of Plastic Surgery at Tel Aviv University. He emigrated to Israel from South Africa in 1952, and between 1958 and 1985 established and headed the department of plastic and reconstructive/facial surgery at Beilinson Hospital. During that period he established the first Burns Unit in Israel.

It was in 1972 that he co-developed the Sharplan Laser. Since its development, more than 3,000 units have been installed worldwide. Kaplan has received the Rothschild Prize for his innovation in Israel, and is Honorary Life President of the International Society for Laser Surgery and Medicine.

"Isaac Kaplan more than anyone impressed me by



his understanding of the needs of the market and the identification of trends, one of these being the move towards ambulatory treatment and the lowering of the cost of this treatment," stated Harel. during a recent interview at Optomedic's manufacturing facilities in Yahud, near Tel Aviv.

In July 1993, intensive R&D work began. The original team of four included a physicist, and specialists in laser optics, electronics and electro-optics.

By January 1994, two prototypes had been completed and in September 1994, production began. The result is the Kaplan PenduLaser. The 8 lb laser module, which required the bulk of the development effort, is smaller than the pendulum of a medium sized grandfather clock - small enough to be suspended above the treatment table. Folded into a small valise, it becomes as easy to transport as an

airline trolley carrying a small overnighter. Together with its service module, the total weight is less than 31 lbs. Units produced by manufacturers such as Coherent, Laser Industries and Luxor, which supply the medical laser market, are larger and considerably higher priced.

Optomedic's product delivers the laser beam through a telescopic arm and a proprietary, sterilizable handpiece. The unit includes novel accessories such as a flexible, hollow waveguide, probes, side-firing handpiece and smoke evacuator. The hollow waveguide is a teflon tube coated to permit the smooth passage of the beam at any angle. This quality is appreciated by surgeons.

The know-how was licensed from Tel Aviv University. Prof. N. Coitoru developed the system. Other companies expressed interest in the technology, but Optomedic researchers convinced themselves that it would suit their needs. They essentially took it from the laboratory to the market place. This is part of the proprietary aspect of the PenduLaser, and the tube is now produced in-house.

The marketplace

The current market for CO₂ lasers is being served by Laser Industries (an Israeli company), Coherent and Luxor (both American based). The prices of the lasers, depending on their strength, range from \$20,000 to \$60,000. Optomedic sells its units at an end-user price ranging from \$13,000 to \$15,000. The PenduLaser can be seen as a potentially serious contender in the surgical-laser replacement market, as well as a viable entry in the market catering to private surgeons and small clinics.

The structure of the company

Optomedic is owned by Prof. Isaac Kaplan and Alex Harel, the Discount Underwriters & Business Promotion Ltd. and other private investors. All financing was done through private placement. The company is an approved enterprise, and enjoys the benefits extended by Israel to its high-tech industries. The development was supported by a grant of about \$100,000 from the Office the Chief Scientist of the Ministry of Industry and Commerce.

Marketing

"We use distributors, but the marketing is taking place by word of mouth," said Alex Harel. More than 30 units have already been sold primarily in South America and the Far East. Harel is looking ahead to the vast American market, which includes 150,000 general surgeons and 130,000 dentists. Over 10 million soft-tissue procedures are carried out annually. Optomedic believes it will shortly obtain Food & Drug Administration approval for the sale of PenduLaser in America.

Personnel

The company employs 25 people - 10 in R&D, nine in production and the rest in administrative tasks.

Strategy

"The product is good; our challenge is to get a share of the market quickly. With this in mind, we are seeking strategic alliances in the American market," advised Alex Harel.

The medical advantages of the PenduLaser are being recognized by user surgeons. "It meets every standard for carbon dioxide laser systems," affirms Alex Harel. Its rate of acceptance, and the company's growth potential, will depend on the company's ability to expand quickly into Europe, the Far East and the U.S. Reaching the universe of surgical laser users is a daunting task. However, word about a new product with visible advantages spreads quickly in a field where excellence is demanded and costs are critically important.

This company is well worth watching.

Teledyne and NI Medical sign \$3 million high tech pact

American aerospace and avionics giant Teledyne Inc. has signed a contract with N.I. Medical, an Israeli company, to establish a jointly owned American firm. Teledyne will invest \$3.0 million in this company, the principal activity of which will be to market medical technologies developed by the Israeli partner. Teledyne will also invest \$1 million in the share capital of N.I. Medical (Israel) Ltd. The negotiations were carried out by local investment banking firm Singer-Barnea. Shareholders in NIM include the Astra Venture Capital fund (with nearly one third of the share capital), a group of partners of Reinhold Cohen (patent attorneys), project developer Zvi Vromen, and the company's CEO, Shmuel Pitavsky.

Background

In January 1993 (as known by IHTIR readers), one of the the fastest-moving projects in Israel aimed to commercialize non-invasive monitoring equipment for hospitals and medical clinics. N.I. Medical was formed in the spring of 1992 to develop equipment based on years of experience in cardiac output measurements by a Russian immigrant from Leningrad. Earlier models had been tested on thousands of patients at the Leningrad Medical Center.

Sasha Zaglin, the 43-year-old immigrant who initially headed the company's research and development, brought fundamental ideas about bioimpedance from his native Russia. Zaglin, who holds advanced degrees in electronics and electrical engineering, described his prototype: "The electrodes

UPDATE

Healthcare Technologies

The Healthcare Technologies Group

Healthcare Technologies ("Healthcare") is an Israeli-based holding company which includes the following subsidiaries -- Savyon Diagnostics Ltd., Diatech Diagnostica Ltd., Diatech Diagnostics Inc., and Savyon-Yaron Diagnostics Marketing Ltd. It is a public company, with shares traded on NASDAQ under the symbol "HCTLF". In December 1994, the bid price was \$1.50 -- at the lower end of its trading range for the year. Nearly 50% of the shares are in the hands of the public. Among institutional investors the biggest shareholder is Rosebud Medical Ltd., an Israeli investment company.

"Healthcare" is engaged in developing, producing and marketing a growing line of kits for the detection of infectious diseases, primarily sexually transmitted diseases and diseases of the urinary and respiratory tracts. The company enjoys the benefits of the Government of Israel special programs for exporting companies including research and development grants and tax benefits under its Approved Enterprise status. The production by the subsidiaries in Israel is concentrated in its 2,800 sq.m. modern facility in Ashdod which complies with the American Good Manufacturing Practice (GMP) standard.

Recent developments

The past year has been an eventful one for the firm, with progress achieved on a number of fronts:

- A corporate merger resulted in the acquisition of an American base for manufacturing and distribution. The U.S. company, Diatech Diagnostics Inc., specializes in developing, manufacturing and marketing diagnostic kits for the detection of drugs of abuse, for thyroid conditions and for the monitoring of steroids and fertility hormones. Fifty per cent of Diatech's sales are in the U.S. and the other half is sold in other countries.
- "Healthcare" has acquired exclusive manufacturing and distribution

rights from the U.S. Devaron Inc., for rapid diagnostic kits for the detection of HIVSAV 1 & 2 antibodies.

- The firm has signed a distribution agreement with the American company Majesco Medical Technologies, which undertook to market 10.5 million HIVSAV 1 & 2 RapidSero kits by the end of 1996.
- The firm acquired distribution rights as a result of agreements in France, the U.K., Spain and in newly opened Eastern European countries.
- Germany's Paul Ehrlich Institute granted approval for the marketing of a chlamydia IgM kit.
- Savyon-Yaron Diagnostics Marketing Ltd. was incorporated and became a subsidiary to market in Israel, Savyon Diagnostics products as well as products from other manufacturers.
- Savyon Diagnostics is active in a collaborative research and development agreement with Beckton Dickinson and two American university research centers on the diagnosis of Micobacteria tuberculosis using genetic engineering technology.
- Prototype product development is well advanced on an amperometric biosensor device. The biosensors

are useful for detecting and determining bilirubin levels.

- A joint R&D project is underway with International Remote Imaging Systems Inc. to develop an inexpensive chlamydia in urine screening immune test. The project was funded equally by the two partners and the U.S.-Israel Bi-National Research & Development Foundation. The development concentrates on a new technology known as Automated Intelligent Microscopy which allows the testing of urine as it flows and the recording of the test results for presentation on a screen.

Sales are growing rapidly

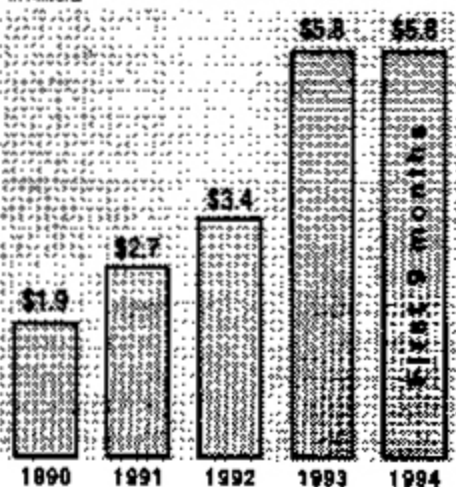
In the first nine months of 1994, the company maintained its growth in sales. Sales advanced by 44% to \$5.79 million from \$4.02 million a year earlier and exceeded the average annual growth of 41% recorded in the preceding four years. For the consolidated subsidiaries gross margins reached 55%. Net profit for the nine months was \$17,000, as compared with \$400,000 in the comparable period a year ago, which included total one-time income of \$235,000. The decrease was attributed to increased marketing costs in the subsidiaries, rising costs involved in gaining regulatory approvals and one time financial expenses. Since the summer of 1994 the company's accounts are being kept in U.S. dollars.

Business philosophy

"We target our products and obtain approvals for them in the most sophisticated markets in the world, including Germany, Japan and the United States. Once the relevant authorities in these countries grant our products approval, we can then more easily market them in many other markets," says Dr. Yeshayahu Yakir, president of Healthcare Technologies. The various steps in the preparation,



Sales
in millions



manufacture and sale of diagnostic products for the American market are subject to approval by the U.S. Food and Drug Administration. Government approval is also required in Japan, France and Germany. In other countries these approvals serve as a testimonial of quality, speeding up registration and thus providing an edge in the highly competitive marketplace.

Ninety per cent of the company's production is exported to the U.S., Europe and Japan.

Locating and developing know-how

Savyon Diagnostics has maintained close contact with Israel's institutes of higher learning. Part of its know-how was acquired in the Virology Department of Ben Gurion University (which has devoted 30 years of research to the field), and from clinical trials conducted by the Clinical Virology Laboratory of the Soroka Medical Center in Beersheba.

The technology acquired from BGU is fundamental to the company's kits for detecting antibodies for Chlamydia, the bacteria which causes one of the most widely transmitted sexual diseases. The company carries out research at its Israeli facility, where 15 of a total staff of 75 are active in R&D. Its programs are conducted with the help of consultants and researchers from the Weizmann Institute of Science, the Technion Institute of Technology, the Tel Aviv University, the Hebrew University of Jerusalem and other professional institutes.

To protect its products, the company seeks patent protection. It has been granted two Israeli patents, two U.S. patents, and one each by Canada, Italy, Germany, the U.K. and France. Other applications are pending.

Products and medical indications

The company's products have been developed for specific areas of the medical diagnostic market:

Sexually transmitted diseases

The three types of chlamydia tests the commonly sexually transmitted diseases for which Savyon Diagnostics produces a line of serology assays. The assays have earned a reputation for accuracy and reliability. They are available as *IPAZyme* for small and medium-sized labs; *SeroELISA* for automated testing in large medical center facilities, and *RapidSero* for quick visual testing which can be used in doctors' offices.

Human Immunodeficiency Virus (HIVSAV) 1 & 2 Rapid SeroTest

The *HIVSAV Rapid SeroTest* is a rapid qualitative test for the detection of antibodies to HIV in human serum or plasma. It is a high-performance test carried out in approximately three minutes. Sales are growing rapidly, and it may become a volume leader for "Healthcare". It is an excellent, rapid, simple screening assay -- even faster than the popular Abbott Test Pack. A patent application has been filed for this test.

The most commercially promising test is designed for the rapid and accurate detection of AIDS antibodies. Using genetic engineering of proteins, the company created the AIDS kit based on a virus protein which identifies antibodies attacking HIV 1 and 2. "We expect sales growth in most of our products, but the *HIVSAV 1 & 2 Rapid SeroTest* may prove to be the engine of growth in 1995," says Dr. Yakir.

Urinary tract infections

Uriscreen is a patented assay developed for rapid (two-minute) screening of urinary tract infections. *Diaslide* is a patented, proprietary culturing device which eliminates the problems associated with dipslides.

Respiratory infections

The *SeroElisa Mp Tests* are assays for the rapid and accurate detection of antibodies to Mycoplasma pneumonia.

Viral infections

Epstein Barr Virus is the main cause of infectious mononucleosis. *IPAZyme* and *SeroElisa* are the company's assays for this virus.

New products moving into the market

Toward the end of 1994, "Healthcare", through its subsidiaries introduced several new diagnostic kits.

The *QuickStripe hcg*, which identifies the hcg hormone in urine or in serum. Its special advantage is that it allows highly accurate testing in the earliest stages of pregnancy.

The *QuickStrike Hepatitis B diagnostic kit* detects the Hepatitis B virus antigen. Hepatitis B is acquired either by sexual contact or through infected blood, and its effect on the human liver can be fatal. The new kit assures accurate and rapid diagnosis by means of a blood test. Additionally, two new chlamydia detection kits have been introduced:

the *Chlamydia Rapid SeroTest* and the *Chlamydia SeroFIA*. The former is believed to be among the world's fastest EIA kits, detecting chlamydia antibodies in serum within six minutes. The highly accurate results are easily read, and the procedure does not require any other equipment. The development of the *Rapid SeroTest* was financed by a Japanese/Israeli joint venture. Clinical trials were conducted in Japan and other countries. The company has patents pending in Israel and in other countries.

The *Chlamydia SeroFIA* (fluorescence immunoassay) allows a differential diagnosis of Chlamydia psittaci, Chlamydia trachomatis and Chlamydia pneumonia. - the three strains responsible for venereal diseases and pneumonia. The antibodies are detected by tagging them with fluorescent stains visible with a microscope.

Worldwide marketing

The global in-vitro diagnostics market for the current product line exceeds \$1.0 billion, and is increasing annually by 15%. The company targets both major and niche markets, and sells its products through independent distributors and Original Equipment Manufacturers (OEM) agreements. The distributors sell the kits mostly to commercial labs and hospitals, which use them to conduct tests requested by physicians. As part of its future marketing efforts, management intends to sign additional distributor agreements with existing companies through joint-ventures and licensing. "Healthcare" is currently selling through distributors in Australia, Austria, France, Germany, Greece, Italy, Japan, Norway, the Philippines, South Africa, South America, Spain, Switzerland, Taiwan, U.K. and the U.S.A. The company is seeking to enter into new markets in Central and South America, Africa, South Eastern Asia and Eastern Europe.

For further information contact:
Dr. Yeshayahu Yakir,
Savyon Diagnostics Ltd.,
3 Habosem Street,
Ashdod 77101, Israel.
Telephone: 972 8 562920
Fax: 972 8 563258

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are attached to the body, and various cardiac output measures are read and recorded. Formerly, cardiac output measurements were carried out invasively, with three major problems: patient safety, cost, and ease of use."

Monitoring cardiac output involves inserting a catheter into the patient's chest. The method is risky, with a 1% mortality rate, causes pain, and does not enable physicians to store, recall or print records in any standardized way. N.I. Medical's bioimpedance unit is a breakthrough which combines known physiological principles with a series of proprietary algorithms.

International and American patents are pending. Dr. Hylton Miller, head of the catheterization lab at Tel Aviv's Sourasky Medical Center, was the first researcher to carry out clinical trials. He is highly enthusiastic about the advantages which the new technology offers, especially in measuring nearly two dozen cardiorespiratory and body fluid functions. "The trials are satisfactory, and I have reported on them at an international conference," says Dr. Miller.

Additional clinical trials - required for international regulatory approval, as well as for eventual marketing purposes - were carried out in European medical centers. "Regulatory approval from the German authorities was recently obtained. American FDA approval is several months away," states Zvi Vromen.

N.I. Medical's product launch in the \$900 million cardiac monitoring equipment market consists of a chip to be included in a cardiac output monitor. The prototype being used in the clinical trials was completed in October 1992. Two other Russian immigrants - one an international expert in cardiorespiratory monitoring and the other an algorithm expert - were part of the N.I. Medical group.

Financial support in the early stages came from private sources connected with the company, and from a grant from the Office of the Chief Scientist of the Ministry of Industry and Trade.

To move along the path of development, clinical testing and product introduction, the firm required substantial capital, and offered part of its equity ownership to venture capitalists and other investors. The entry of Teledyne as a strategic partner provides the local company with a springboard into the vast American market.

Lehman Brothers opens in Israel

The American Investment Banking & Brokerage firm, Lehman Brothers, has opened an office in Tel Aviv. The opening was notable as the firm became the first major American investment bank to establish a permanent office in this country. Lehman Brothers

is the most active market-maker of securities for Israeli companies. In the past four years it has managed 20 offerings of Israeli-related issues. Spokesmen for Lehman have indicated that they expect, by establishing a presence, to provide better service and to expand their reach throughout the area, as well as to bring new investments to Israel. They also pointed out that by its very presence it is sending a clear signal to others: Israel is a financially attractive country. This, will lower the perception of risk of doing business here.

Bird Foundation to invest \$8 million in 13 projects

The board of governors of the Israel-US Binational Industrial Research & Development Foundation (BIRD) has approved 13 new projects. BIRD's investment in these will amount to \$8 million, representing a 50% cost-sharing.

The partners in each case consist of an Israeli and an American company. The Director-General of the Israeli Ministry of Finance, Mr. Aharon Fogel comments on the positive aspects of BIRD: "This collaboration between Israeli and American companies often allows Israeli firms with impressive technological expertise but limited experience in international marketing to gain access to major world markets which they otherwise might not have reached," said Mr. Fogel.

BIRD Executive Director Dan Vilenski, expects a significant increase in the number of Israeli-American joint ventures as a result of the peace process.

"Those American companies which, due to political considerations, have till now been wary of investing in Israel will, in the near future, respond to the attractive investment possibilities of Israeli industrial and high-tech companies," predicts Mr. Vilenski.

U.S.-Israeli Biotech Alliance Conference January 12, 1995

The U.S.-Israel Biotech Council, in cooperation with the U.S. Department of Commerce, the government of Israel's Economic Mission, the North American-Israel Chamber of Commerce Inc., Ernst & Young (a leading auditing firm), and a number of other companies and groups are holding a major "partnership meeting" - called Alliance - during the BioEast conference in Washington DC.

Leeches and genetically engineered substances

Hirudina is the scientific name for leeches, known for their habit of sucking blood. At one time leeches were widely used in medicine, and to a minor extent are still used in undeveloped countries. Otherwise, they are of absolutely no importance to man and are simply an occasional annoyance. However,

biotechnologists have now duplicated an agent similar to the secretions of medicinal leeches, and see it as a potential new treatment for cardiac patients. When administered to patients, this substance - sometimes in combination with additional agents - dissolves blood clots. The clinical research being carried out is part of a broad international program taking place in the USA, Canada and Britain. It is centralized at Harvard University, and is being supervised by the FDA.

Aware of the experience and successful experimentation programs in Israel, where patients suffering heart attacks have been treated with clot-dissolving agents, the American research headquarters invited Israeli scientists to take part in the program. Leading researchers in Israel include Dr. Gabi Barabash of Tel Aviv Elias Sourasky Medical Center, and Dr. Chanoch Hod of Chaim Sheba Medical Center. The cardiology departments in eight Israeli hospitals are participating.

The first stage of the research was carried out in the United States, and local research was authorized by the Helsinki Commission of the Israeli Ministry of Health, as a follow-on to the program being conducted in the United States. Initial results show that the new genetically engineered substance brings about additional improvements in patients who have suffered heart attacks.

Electronics Industry sales grow by 13% in 1994

Electronic sales for 1994 will total \$5.2 billion, and exports will reach \$3.75 billion, according to a report issued by Chanan Achsaf, chairman of the Association of Electronic Industries in Israel. Export sales surged at an even greater pace, by 17%, and totaled \$3.75 billion. In 1993 exports totaled \$3.2 million. Due to the relative smallness of the Israeli market, it is not surprising that the efforts of local industry are aimed at export, and account for 72% of the total annual output of Israel's electronic industries. Exports of non-defense products recorded an outstanding growth of 25%, understandable in the context of a worldwide decline in defense spending. For the third consecutive year, the communications sector performed outstandingly.

Telecommunications, wireless communications, and information communications have been growing at rates of 40 - 45% per year since 1992.

In 1994 the electronics industry employed 38,000, a growth of 4.5% in comparison with 1993. The output per-employee was \$137,000 per year.

The decline in profitability is connected to the weakness of the U.S. dollar. Furthermore, the rate of exchange of the Israeli shekel vis a vis the dollar has not changed by more than 1% since the beginning of 1994.

Xenograft Technologies revisited

Since it opened its development unit last summer at the Weizmann Science Based Industries Park (IHTIR-9/94), Xenograft is reportedly making progress towards creating monoclonal antibodies for viral diseases and Hepatitis B. The scientific work is based on a novel technology for transplanting bone marrow into mice and then isolating the antibody and cloning it. "We have nothing concrete as yet, but are progressing satisfactorily" says General Manager Dr. Zachi Berger. In August Dr. Berger estimated that it may take up to six months to create the first antibody. Former Syntex vice-president Marty Becker has recently been appointed Xenograft's president and CEO. On the business side, negotiations are taking place to establish a joint collaboration with a major but unnamed company.

Financing

So far, \$8 million has been invested in Xenograft, and a new round of financing is being prepared. It is targeted at larger investors, primarily venture capital groups in Europe and the US. Xenograft Technologies is owned by Yeda Development Co. Ltd., of the Weizmann Institute (approximately 30%), the American venture capital Castle Group (under 20%) and the balance by private investors.

ECI Telecom market capitalization falls

ECI Telecom shares dropped by about 25% recently in New York. In a classic case of overreaction, investors and institutions sold ECI shares in response to a downgrading in a broker's evaluation from "strong buy" to "buy". Alex Brown changed its profit projection for 1994 from \$1.03 to \$1.01, and for 1995 from \$1.25 to \$1.15.

Japanese may invest on Tel Aviv Stock Exchange

During his recent visit to Japan, Prime Minister Yitzhak Rabin was told that there are good prospects for investments by Japanese institutions in the shares of Israeli companies on the Tel Aviv Stock Exchange. The strong Japanese yen and the low evaluations in Tel Aviv make such investment attractive.

Capital gains tax imposed on stock exchange investors

Until December 19th there was some question as to whether the law imposing a tax on capital gains in the stock market would be imposed. However, on that day Prime Minister Yitzhak Rabin, after consultations with Finance Minister Avraham ("Beiga") Shohat, announced that the law would be imposed without delay. However, Mr. Rabin left the

door open to future changes. He specifically pointed out that he intends to "monitor the application of the law, and if it should be so required to make changes, as is the case with any law."

The law calls for investors to pay a capital gains tax on shares and debentures (not securities) sold after January 1, 1995. The base for the calculation is to be the price of the security on the last trading day of 1994. The investor will be given two options - to pay a 10% tax on profits without the possibility of offsetting profits against losses, or to pay a 20% tax with the possibility of offsetting profits against losses. The tax program was announced in August, and was officially passed by the Knesset, Israel's parliament, a few weeks ago.

Pharmos completes Phase III clinical trials for Lotemax

Pharmos (NASDAQ-PARS) reported a success from its clinical program when it announced at the end of December that it had completed Phase III clinical studies on its lead product Lotemax, an ophthalmic anti-inflammatory drug. The company anticipates submitting an NDA this month requesting approval for Lotemax as an ophthalmic anti-inflammatory steroid.

(Ed note: an NDA ophthalmic approval usually takes one year, though Merck has obtained one in a shorter period. It is no secret that Haim Aviv, Pharmos'

chairman, is seeking corporate partners with a strong technological foundation to strengthen the firm's financial base.)

Strong activity in medical research

For each 100,000 Israelis there are 32 medical researchers active in hospitals and universities. This percentage confirms Israel's high standing among the community of nations in terms of overall research and development activity. A study carried out by the Office of the Chief Scientist of the Ministry of Health - which covered 90% of all research projects in medicine - indicated that there are 1,585 researchers. Of these, 60% are employed by hospitals, while 40% are employed by universities.

The Jerusalem Hadassah Medical School and Hebrew University are in first place, while Tel Aviv area hospitals and Tel Aviv University come in second in terms of both research projects, the number of active researchers and research publications.

Privatization of Israel Chemicals to move ahead

On September 26, 1994 the Ministerial Committee for privatization decided to sell 15% to 24.9% of Israel Chemicals Ltd. (ICL) to a private investor. The government had previously sold about 25% of the company's equity to the public. Initially the government's holdings will be reduced to 60%, but it will later sell more equity so as to remain with a 28% stake. This latter sale will be carried out by offering securities on the local and international markets. The Israel Corporation has already expressed interest in acquiring a holding.

ICL is Israel's largest chemical group, with annual sales exceeding \$1.0 billion in 1993. The company has successfully exploited Dead Sea minerals, as well as mineral deposits in the Negev Desert. ICL has developed proprietary processes to refine these basic resources. Since the signing of the Peace Agreement, the company has extended its contacts, and is taking advantage of opportunities in the emerging markets in Asia and the Far East. The company's chemical sector includes the following products: flame retardants, food-grade phosphoric acid and specialty chemicals. Its fertilizers division specializes in potash and phosphoric acid. In the first nine months of 1994 ICL earned \$34.3 million on sales of \$908 million. For all of 1993 its sales were \$1.007 billion, on which ICL earned \$37.4 million. The company's shares are traded on the Tel Aviv Stock Exchange at just under \$0.30, for a price earnings of 30 times 1993 earnings. The gradual recovery in demand and prices for fertilizer products should further help the company's results for 1994 and 1995.

Share Rise Before December 29

