Embassy of Israel
Washington, D.C.

Did You Know?

Science & Technology in Israel

American Technion Society

Nanotechnology graduate student at the Technion

Weizmann Institute of Science

Solar Tower laboratory at the Weizmann Institute of Science, which contains a field of 64 large, multi-faced mirrors

Israel has long been on the cutting edge of research and development of high technology. A country of limited natural resources, Israel's scientists and engineers have been constantly faced with the challenge of quickly devising new and innovative solutions. History and geography have made Israelis adept at identifying problems, finding solutions, and quickly turning ideas into commercial products.

Theodor Herzl, the founder of the Zionist movement, promoted the idea of a modern Jewish state not only as a physical home for Jews, but also as a spiritual, cultural and scientific center. The Technion-Israel Institute of Technology, the Hebrew University of Jerusalem, and the Daniel Sieff Research Institute (later renamed the Weizmann Institute of Science) were all recognized institutions prior to Israel's establishment in 1948. These institutions are recognized today as some of the best institutions of higher learning and research in the world.

In 1948, the newly-created Israel Defense Forces established a branch called the Science Corps. The Corps developed new arms, explosives, and a variety of electronic appliances for the IDF. Israel's military industry developed at a rapid pace, meeting the country's needs for armaments and technologies which it could not obtain from abroad. Israel today remains a leader in the development of military technologies.

Research and development (R&D) in Israel has grown far beyond the military. There are dozens of government, defense and public research institutes, medical centers and universities conducting agricultural, industrial, energy and medical R&D. Overall, Israel ranks among the top seven countries worldwide for patents per capita.

Rafael, Armament Development Authority

Rafael's Trophy active protection system creates a hemispheric protected zone around a vehicle where incoming threats are intercepted and neutralized

Israel National Photo Collection

Employee of the Intel high-tech factory in Jerusalem manufacturing computer chips

Israel National Photo Collection

Ramat Gan, a city in the Tel Aviv district, is home to a large concentration of skyscrapers, the Diamond Exchange and many high-tech businesses

An astonishing 70% of Israel's exports are in the high-tech sector and Israel is home to the greatest concentration of high-tech start-up companies anywhere outside of Silicon Valley.

The essence of Israel's achievements in the high-tech sector is the quality, energy and enterprise of its people. Twenty-four percent of the country's workforce are university graduates, the highest proportion in the world after the U.S. Israel has the world's highest percentage of engineers and the highest number of medical doctors per capita in the world. In addition, Israeli academics publish more scientific papers in international journals than any other country in the world.

Israel's high-tech workforce has continually been strengthened by immigrant populations. Many of the countries early successes in agricultural technology were a result of Jews who had fled from Nazi Germany. In the 1990s, more than one million Jews from the former Soviet Union arrived in Israel. An astonishing 2.3% of these newcomers had second or third degrees (most in R&D disciplines).

American companies such as Motorola, IBM, Microsoft and Intel chose Israel to establish major R&D centers. Remarkably, Israel has more companies listed on the NASDAQ than any country outside North America.

2007, The Nasdaq Stock Market, Inc.

Teva Pharmaceutical Industries, Ltd. presiding over the NASDAQ Stock Market Open Bell

Medical Innovations from Israel

Given Imaging, Inc

Given Imaging developed the first ingestible video camera known as the PillCam®. The capsule endoscopy has become a standard practice in the majority of gastroenterologist practices.

BabySafe USA, LLC

Hisense Ltd. developed Babysense, a respiratory movement monitor that sends out an alarm if a baby stops breathing while asleep, as in SIDS (sudden infant death syndrome).

Smart Biotech, Ltd.

SMART Biotech Ltd. invented SMART-ube, offering the most complete detection of HIV and Hepatitis C infected individuals by enabling antibody production using a small sample of blood within days from infection. This is the only technology that enables such early detection.

Teva Pharmaceuticals

Teva Pharmaceuticals' Copaxone, a drug developed at the Weizmann Institute of Science, is prescribed by doctors worldwide as a treatment for Relapsing-Remitting Multiple Sclerosis (MS).