TECHNION **AT A GLANCE**

AMERICAN TECHNION SOCIETY

Prof. Mordechai Segev *(left)* leads Technion teams in quantum science. Their research has opened the door to numerous applications, including the development of unbreakable encryptions to ward off cyberattacks.

Since 1912, the **Technion - Israel Institute of Technology** has been a pioneer in research and science education, delivering world-changing impact benefiting the State of Israel and the world. As Israel's first university, the Technion has educated generations of engineers, architects, and scientists who have played a key role in laying the nation's infrastructure and establishing its crucial high-tech industries.

Today, the Technion's unique focus on interdisciplinary research and education challenges students to think differently about the world's problems, preparing students to become the next generation of global innovators.

Be a part of the *Technion Impact* — the incredible and incomparable effect that the Technion has had on Israel and the world.

UNIQUELY TECHNION

International Leader

» A truly global university with a presence in New York and China, and strategic partnerships with institutions like the University of Michigan, Cornell University, and more

» An entrepreneurial powerhouse with its Joan and Irwin Jacobs Technion-Cornell Institute in NYC, which brings academia and industry together and features an incubator, the Runway Startup Postdoc Program

Powering Israel

» Home to Israel's only Faculty of Aerospace Engineering

» Israel's only Faculty of Medicine that is integrated into a university exclusively focused on science and engineering

World-class Education

» Faculty includes three Nobel Prize laureates in science

» Globally ranked Faculties of Computer Science & Electrical Engineering

THE TECHNION DOES

MORE WITH LESS

$4 vs. $1

$1 invested in a US University equals a $4 investment at Technion

$100M vs. $500M

$500M research budget in a US University can be accomplished with $100M at the Technion

TECHNION BY THE NUMBERS

Founded in **1912**
Classes started in **1924**

120,365 Degrees Awarded
50 Undergraduate Programs
83 Graduate Programs

566 Faculty
14,734 Total Students
- » **10,174** Undergraduate
- » **2,873** Master's
- » **1,158** Ph.D.
- » **529** Medical

60 Research Centers
18 Faculties

HUB FOR **COEXISTENCE + DIVERSITY**

- » **Female students account for 50% of graduate students,** and **40% of the overall student body**
- » **20% of students are Israeli-Arab,** mirroring the makeup of Israel's Arab community
- » **Over 1,000 international students** from 30+ countries
- » Special pre-university programs prepare **students from underserved communities and ultra-Orthodox** adults lacking a secular education for success at Technion

DRIVING

ISRAEL'S ECONOMY,

Fostering entrepreneurship

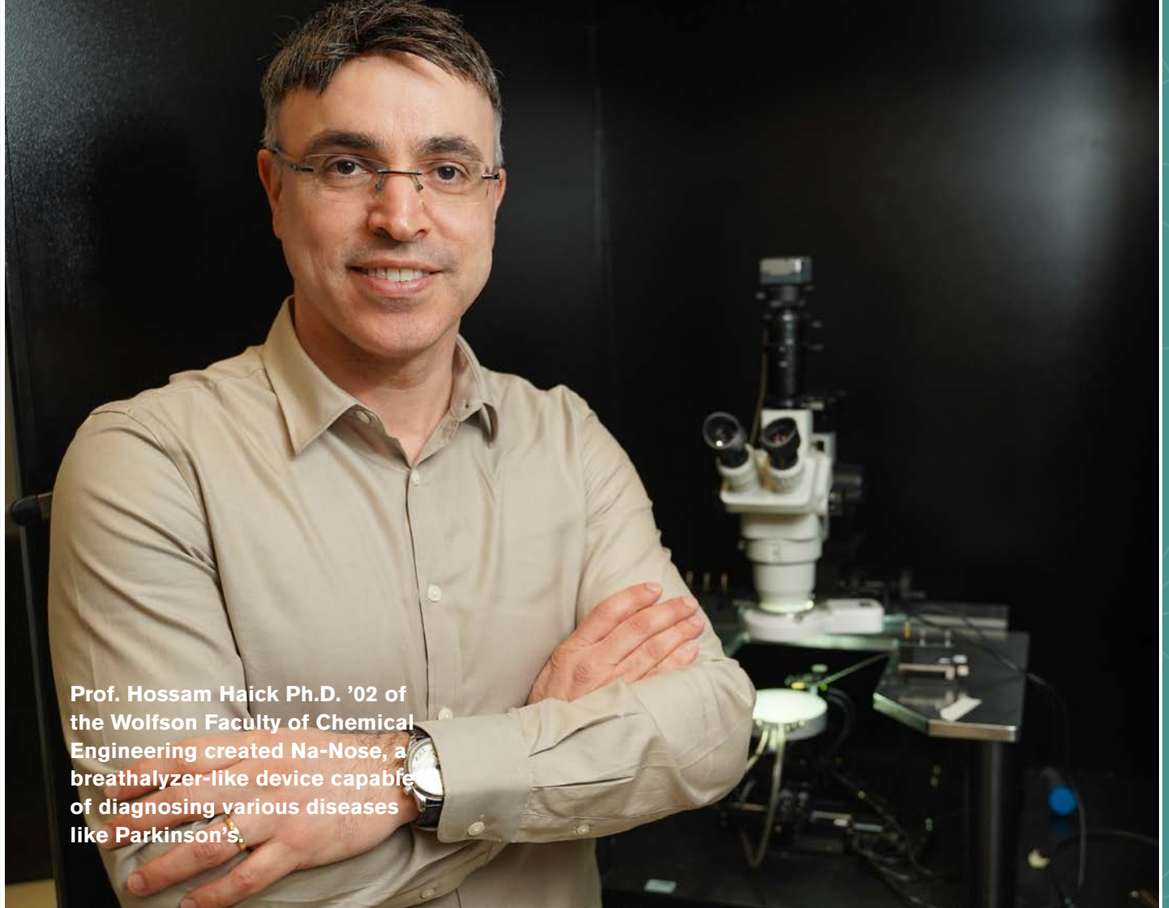
» From 1995 to 2014, **95,500** jobs and **$30 billion** of revenue were generated by companies run or founded by alumni

» More than **70%** of Technion alumni are employed in Israel's high-tech workforce

» **25%** are CEOs or vice presidents, and **41%** hold management positions

» **25%** have founded at least one startup

» **42** of the **72** high-tech Israeli companies on NASDAQ with a combined market cap of **$22 billion** were founded or are run by alumni



Prof. Hossam Haick Ph.D. '02 of the Wolfson Faculty of Chemical Engineering created Na-Nose, a breathalyzer-like device capable of diagnosing various diseases like Parkinson's.

From cancer to COVID-19

MEDICAL INNOVATIONS SAVING LIVES

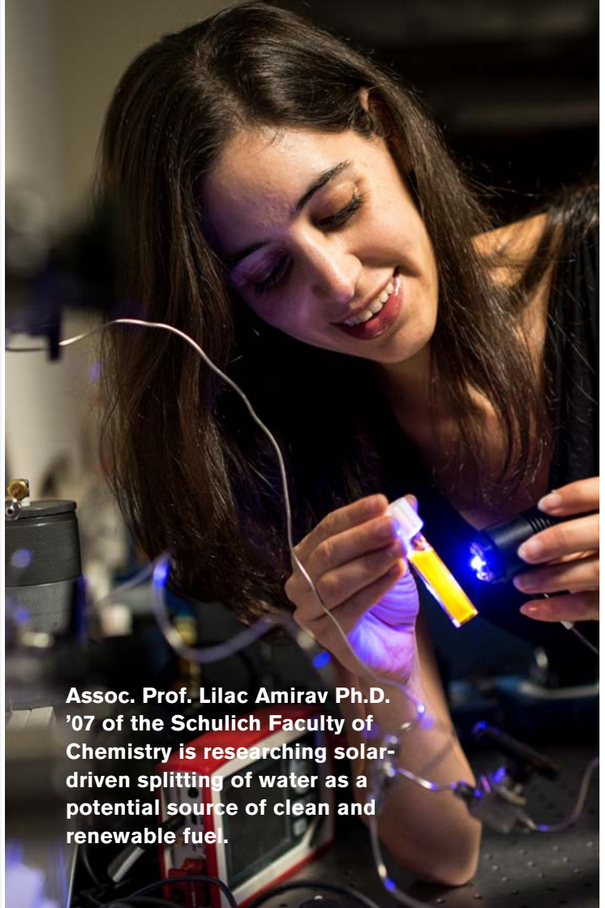
» Created by Professor Eyal Zussman in response to the COVID-19 pandemic, the antiviral **Maya sticker** for surgical masks protects healthcare workers by killing the coronavirus upon contact

» Professor Hossam Haick's **Na-Nose** technology can detect Multiple Sclerosis and certain types of cancers from breath samples

» A drug to treat Parkinson's disease, **Rasagiline** — now marketed worldwide as **Azilect®** — was first discovered by Professors Moussa B.H. Youdim and John Finberg

» Technion doctoral student Muhammed Khatib invented a **self-healing artificial skin**

» Distinguished Professors Aaron Ciechanover and Avram Hershko were awarded the Nobel Prize for their discovery of the **ubiquitin system** — a breakthrough that led to the development of **Velcade®**, a drug that combats multiple myeloma, a type of blood cancer



Assoc. Prof. Lilac Amirav Ph.D. '07 of the Schulich Faculty of Chemistry is researching solar-driven splitting of water as a potential source of clean and renewable fuel.

SUSTAINABILITY

Innovations for a greener world

- Scientists at the Technion's Stephen and Nancy Grand Water Research Institute helped **build Israel's five water desalination plants** and are now developing next-generation desalination processes
- Technion researchers are at the forefront of **alternative and renewable energy**, and have developed a new method for the production of **hydrogen from water** that uses solar energy
- Packaging that **extends the shelf life of food** and **lab-grown steaks** are two of the many Technion solutions to food scarcity

Iron Dome, military technology used to intercept and eliminate short-range rockets, was developed by Technion alumni working for Rafael Advanced Defense Systems and Israel Aerospace Industries.

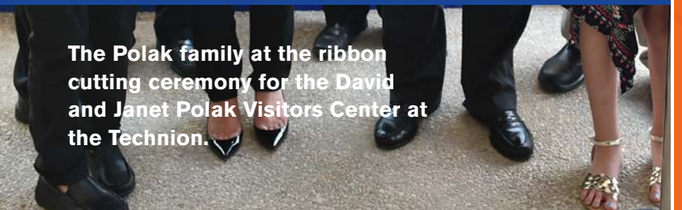
SECURITY

Keeping Israel and the world safe

- Launched in 1954, the **Faculty of Aerospace Engineering** has trained most of Israel's leaders in air and space, underpinning the nation's $10 billion dollar industries in those areas
- Technion graduates were instrumental in the development of **Iron Dome**, the anti-missile defense system that protects Israel by intercepting and destroying rockets
- With centers dedicated to **cybersecurity** and **quantum**, the University continues to safeguard the world from **cyberterrorism**

Be part of the

#TECHNION IMPACT



The Polak family at the ribbon cutting ceremony for the David and Janet Polak Visitors Center at the Technion.

SUPPORT
THE TECHNION

The Technion's achievements are made possible by highly committed friends and donors. Your support helps the Technion solve the greatest challenges of the 21st century.

Join our nationwide community of change-makers. Over the past 80 years, partners of the American Technion Society (ATS) have contributed nearly $3 billion to realize the impact of the Technion on Israel and the world. Launched in 1940 by a group of visionary entrepreneurs and scientists that included Albert Einstein, ATS is served by regional offices around the country.

To connect with your local ATS office, visit **ats.org/locations** or email **info@ats.org**.

Assoc. Prof. Shai Shen-Orr '99 *(left)***, head of the Technion's Systems Immunology and Precision Medicine Lab, has developed a method for quantifying "immune age," a better measure of health than chronological age.**

AMERICAN TECHNION SOCIETY

From **VISIONARY EDUCATION** to a **WORLD** of **IMPACT**

ABOUT

The American Technion Society supports visionary education and world-changing impact through the Technion - Israel Institute of Technology. Based in New York City, we represent thousands of U.S. donors, alumni, and stakeholders who invest in the Technion's growth and innovation to advance critical research and technologies that serve the State of Israel and the global good. For more than 75 years, our nationwide supporter network has funded Technion scholarships and fellowships, research, labs, and facilities that have helped deliver contributions and extend Technion education to campuses on three continents.

Pictured on front: Prof. Marcelle Machluf (right), dean of the Technion Faculty of Biotechnology and Food Engineering, is renowned for her cutting-edge cancer and drug delivery research, and her work in tissue regeneration.

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