

# This is our legacy... Why not make it yours?

Support Technion, strengthen Israel.



### A PERSONAL DECISION TO MAKE A LASTING DIFFERENCE

Of course, we understand and respect that your decisions about your Will are private, personal and made after much consideration. We're immensely grateful for every gift we receive, whether it is a specific sum, an item, or a small percentage of whatever is left once you have thought about those close to you.

It would be of great help to Technion UK if you could let us know of your intention to leave us a legacy by completing the enlosed card and returning it to us.





Technion alumnus and professor, Michael Bronstein is a computer scientist, engineer and entrepreneur. After selling his company Invision to Intel, he took office as Principal Engineer of the technology giant's Perceptual Computing Group. Bronstein is professor at the University of Lugano, Switzerland and since 2018 is Chair in Machine Learning and Pattern Recognition at Imperial College in London.





A message from the CEO

> or many of us, a Will is the chance to look after our family and friends once we have

gone and to leave behind something that will help the people we love.

But also leaving a gift in your Will to the Technion-Israel's Institute of Technology and Science gives an incredible and lasting opportunity to help many others we may never know.

Technion is Israel's leading Nobel Prize winning University which is ranked amongst the top 10 science and technology universities in the world. Through its cutting edge research in engineering, computer science, technology and medicine, Technion is changing peoples lives everywhere. At the same time Israel relies on Technion science for its defence, the safety of its people and its future.

In this booklet we try to highlight just some of the many incredible achievements that this leading institution has contributed to Israel and the world in the past and with your help, they will continue to do even more in the future.

Thank you very much for considering leaving a gift in your Will to the Technion and Israel and for being a part of Technion's legacy to help save people's lives all around the world.



Alan Aziz Chief Executive Technion UK

### CONTACT US IN STRICT CONFIDENCE

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### THIS IS OUR LEGACY WHY NOT MAKE IT YOURS?

Without your vital support many of our projects would not be possible. A gift in your Will to Technion will ensure that groundbreaking discoveries can continue, you can make a difference, be a part of the future and have an everlasting memory of you for generations to come. Technion's science and technology is opening new frontiers and creating novel products to the benefit of Israel and mankind.

### HOW YOUR LEGACY CAN HELP

Technion is a special place where dreams come true. It is home to thousands of students, researchers, professors and educators from all over the world, chosen from the finest minds and the brightest stars. All are drawn to Technion by its insatiable thirst for knowledge and progress, all in the name of peace and harmony, and the welfare of mankind.

**Technion is a gift.** With your legacy, its work will continue and be passed from generation to generation to ensure that Jewish continuity will flourish.



### The Technion Legacy for the State of Israel

From the vision of Israel's forefathers through to building the fledgling state and securing its scientific and entrepreneurial future, Technion has been one of Israel's greatest sentinels for the past century. Training



The Technion building in World War I

successive generations of bright young minds to ensure the safety and well-being of the Jewish people in the promised land has not been without cost - but our resolve has never been stronger to see the future forward for our country and for the Jewish people.



Technion students join the British in battling the Third Reich



Albert Einstein, Technion's Founding Father and President of the first Technion Society, visits in 1923.

First class of graduates in engineering 1929. Technion absorbed faculty and students fleeing Europe in the years before the second world war.

#### Repairing British ships and tanks during WWII. In the aftermath of the war, Technion workshops were used for the manufacture of weapons for the *Haganah* (later to become Israel Defense Forces).





From helping conceive and build the national water carrier, to the drip irrigation systems that have revolutionized agriculture in arid regions worldwide, and the daunting infrastructure projects needed by the young state, Technion engineers formed the main technological workforce building Israel.

Reinforcing the Western Wall (*Kotel*) after the reunification of Jerusalem in 1967.



The sixties were a decade in which Technion opened its doors to hundreds of students from Africa and Asia where technological assistance was urgently needed.



### '80s

From fiber optics to optoelectronics, Technion graduates are at the forefront of Israeli innovation. The faculties of Computer Science and Electrical Engineering are ranked among the best in the world.

Technion establishes technological incubator companies and structures to ensure absorption of students and faculty from the former Soviet Union.

## 2000 - Present

Integrated in the most advanced positions in Israel's technology industries, Technion alumni work to develop leading security applications. From cyber security to medical robotics and, nano research, stem cells, quantum research and nearly every basic science and applied technology discipline, Technion shows leadership and takes first place in global rankings of Israeli Universities. Technion becomes Israel's premiere University with global impact, presence and reach.

During this period Technion gains global stature and presence partnering with Cornell to become the only foreign university to give degrees on American soil. Guangdong-Technion is born with the percious help of the Li Ka-shing foundation to create a technological dynamo on the Chinese mainland.



### **TECHNION FLIES INTO THE FUTURE**

echnion science and technology is transforming futuristic ideas into effective systems that will benefit humanity on a global scale.

The Adelis-Samson project, an autonomous group of three nanosatellites, built and developed by the Technion, has been launched into orbit.

The project demonstrates a new concept in nanosatellite design and will enable many operations to be carried out that have been reserved until now for large and expensive satellites. The invention of nanosatellites is comparable to the scale of switching from a large computer to a tiny cell phone.

The cluster of satellites are flying in formation in space by utilising autonomous communication and control, without needing guidance from the ground and are being used to calculate the location of people, planes and ships and other applications including search and rescue and environmental monitoring.

In the near future thousands of nanosatellites could cover the Earth enabling high-speed internet communication at a significantly lower cost than is currently available.

This technological advance in the field of miniature satellites, has made the Technion a global pioneer in the fields of geolocation and satellite communication.

### Notable AI and autonomous achiements by faculty and alumni

Autonomous satellite swarms

Search and rescue snake robot

Nano-parachutes

Face recognition software



# NHS approved



### Notable Achiements by faculty and alumni

Discovery of Ubiquitinmediated protein degradation by Technion Nobels Profs. Avram Hershko and Aaron Ciechanover

Non-invasive brain surgery for sufferers from tremors

First human embryonic stem cells

Medical robotics - Rewalk / Mazor

PillCam

SealV surgical glue

Azilect - Parkinson's drug



### MEDICINE

echnion is an applied science and research powerhouse. It is at the forefront of medical innovations for cancer, heart disease, and neurodegenerative disorders to cite but a few.

In fact the first human embryonic stem cells in the world were harvested at Technion and beating heart tissue was created in a lab using stem cells.

Technion researchers have developed a revolutionary new treatment capable of eradicating cancer cells from tumors using a "nano factory" of synthetic cells that produce anticancer proteins within malignant tissue. The research hopes to produce a range of protein medicines for personalized care across a wide range of cancers.

Technion researchers have also developed a technology enabling drug delivery to target diseased tissue using particles of gold and light. These particles can target cancerous tumors without damaging healthy tissue - as is currently the case with chemotherapy and other generalized cancer treatments.

Technion researchers also pioneered non-invasive breathalizer cancer diagnosis, liquid foam therapies for drug delivery to treat acute respiratory syndrome, and surgical robotics that have changed medical practice.

The early-stage Parkinson's drug Azilect changed the quality of life of sufferers worldwide.



### SUSTAINABILITY

echnion has been the source of numerous largescale sustainability projects benefitting Israel and the world. Students are sensitized to the environmental challenges facing the planet and are very active in global green initiatives such as Engineers Without Borders.

To cite but one example, imagine a system that can extract water from air, bringing hope to millions of people living in isolated communities.

Access to fresh water, which we take for granted, is one of the seventeen Sustainable Development Goals adopted by the United Nations.

Technion has developed a breakthrough technology that meets the colossal challenge of water shortages by separating moisture from the air and condensing the vapour at very high pressure.

This unique process which offers an additional advantage of removing pollutants from the air, is being turned into a commercially viable product, enabling water to be produced anywhere in the world.

Students and faculty travel to developing countries to share innovation and develop self suffient systems to improve quality of life in poverty stricken rural villages.

## Notable Achiements by faculty and alumni

**Drip Irrigation** 

Water desalination

Turning the desert green

Engineers without Borders student groups have made great impact in Nepal and on the African continent



## Notable Achiements by faculty and alumni

Discovery of quasicrystals, a new category of matter by Nobel Laureate Technion Prof. Dan Schechtman

Discovery of quantum light tunneling mechanisms

**Biological circuits** 

The firts microscope capabale of seeing the movement of light over time

Nano ghosts

### **BASIC RESEARCH**

B asic research is the basis for much innovation and figures among the biggest reasons so much innovation comes out of Technion. It is also the reason that a number of Technion faculty and alumni received the Nobel Prize in recent years.

Researchers are pushing the boundaries of our collective understanding, but they are also creating ever finer and more precise instruments with which to see the natural world. Recently, Technion research yeilded the first microscope capable of viewing the flow of light over time. To date it was only possible to catch a still glimpse of the phenomenon.

From the nanoscale all the way to outer space, Technion researchers are representing Israel worldwide at the most pretigious scientific forums and through a multitude of scientific collaborations with institutions known for world-class research, academic excellence, an exceptional student body, and the highest levels of innovation, creativity and scholarship.





Technion alumni have also invented some ubiquitously iconic accessories to our universal tech meta-culture.

# UK legacies that have helped transform the Technion

# Joan and Reginald's Pledge

oan and Reginald Coleman-Cohen were prominent members of the Hove Jewish Community. They also recognised the vital importance of the Technion to the State of Israel and felt it was important to support the Technion by leaving a legacy in their Wills. Joan and Reginald were particularly interested in the many aspects of Technion's medical research and they took much pleasure in learning about the work of Technion's younger students.

After Reginald passed away, Joan who was an excellent piano player, took an even greater interest in the many technological innovations coming from the Technion and she very much enjoyed our regular get togethers.

The proceeds from the Wills of Joan and Reginald were used to establish a student exchange programme supporting research students between the Technion and UK universities.

In addition to this exchange programme, Technion UK was also able to build and dedicate a magnificent student swimming pool as a further lasting tribute to the memory of Joan and Reginald.



CHARTWELL. WESTERHAM. KENT. May, 1958

It is a source of great regret to me that I cannot be present with you at the Opening of the Technion Institute. I have followed with keen interest the progress of this far-sighted and enlightened endeavour.

I have been a Zionist for many years, and I view with pleasure and admirstion the maturing of the State of Israel. So to increase the technical aptitude of your people is indeed commendable. It is perhaps the most urgent requirement of any free country who wishes to preserve its standing, dignity and independence.

I pray that your efforts may be crowned with success, to the detriment of none and to the lasting benefit of all the peoples of the Middle East.

hinston &. Churchill

# Bernard's Commitment

t the heart of the Technion Campus is the Churchill Auditorium and Plaza. Winston Churchill, Britain's wartime Prime Minister was an enthusiastic supporter of the Technion and was delighted to have the Auditorium named after him. Many British donors contributed to the construction of this very impressive Auditorium, which was opened with a ceremony attended by members of his family. Heads of State and other VIP's are received there and it is the location for graduation ceremonies and many high profile activities.

In front of the Auditorium is the Plaza. It is the largest outdoor area of

the Technion campus and hosts receptions, outdoor events and many student gatherings. Around the Plaza, major international donor recognition plaques are located.

Recently, the Plaza was upgraded with a very important legacy from the estate of Professor Bernard David Casson. Bernard, was a well respected lawyer, who believed in the vital importance of improving Technion facilities, the education of its students and the far reaching impact of Technion research. The wonderful views from the new Plaza across the Technion campus will be a lasting memory of Bernard's legacy. רחבה לוכר פרופ' דיויד ברנרד חסון

Prof. David Bernard Casson Memorial Plaza

## Hubert and Lizette's legacy gift

ubert was born in Vienna. After working in the wine growing industry he escaped from the Nazis in 1938 and came to London. Lizette his childhood sweetheart also escaped from Austria. Hubert and Lizette didn't have a family and they worked hard in their respective jobs. Hubert was a successful engineer and Lizette was a leading seamstress for Hardy Amies and her clients included prominent members of our Royal family.

Hubert's enthusiasm for the Technion grew and grew and he realised just how important the Technion would be to the growth of the State of Israel. Hubert decided to leave his entire estate as a legacy to the Technion.

In accordance with his Will, Technion UK built a state-of-the-art dormitory on the Technion campus. The Hubert and Lizette Nassau Dormitory now proudly stands on the slopes of the Carmel Mountain in Haifa. It is used by some 100 students with accommodation for single students, married students with children and specialised accommodation for disabled students.

It is a lasting tribute to Hubert and Lizette that this dormitory will be used for generations of students to come.





# Support Israel with your legacy.

our legacy will help to ensure that the Technion has the resources it needs to educate its students, equip its researchers, and respond to the scientific and technical challenges of our generation.

We believe that when the Technion, Israel Institute of Technology in Haifa is strong, the State of Israel is strong — and our world is a better place. Technion UK is the only organisation in the UK that has successfully supported the Technion by establishing student scholarships, funding research, building labs, and facilities that are producing critical breakthroughs for our generation and our future generations.

When you leave a legacy to the Technion every pound will go towards the education, research, and the breakthroughs that will change people's lives around the world. The Technion is able to invest in

### We need your support so that the Technion is going to meet the needs of a growing and changing world

some of the world's greatest minds because people like you can support the Technion with a legacy.

In these unprecedented times, the Government knows that when it comes to COVID-19, science is saving lives. When the first cases of COVID-19 began appearing around the world, the Technion immediately created new scientific research to diagnose, treat, and ultimately prevent the spread of the coronavirus. In total, more than 50 labs are focused on combating COVID-19, ranging from vaccine research and therapeutics, personal protective equipment, diagnostics, developing robots for remote medical care, and assistive technologies for healthcare providers.

Because they know these solutions can't wait, these scientists are working on accelerated timelines to ensure their research gets to the bedsides of those who need it – quickly.

### **LEAVING A LEGACY**

There are three main types of gift that you might consider leaving to technion:

### A residuary legacy

A share of your estate known as a 'residuary legacy', is a percentage of what remains of your estate after all other gifts and expenses have been paid. One of the advantages of a residuary legacy is that it won't be affected by inflation as its value will change in line with the value of your estate. This means you're less likely to need to amend it in the future.

### A specific sum

Called a 'pecuniary legacy', a gift of a set amount.

### A specific item

It could be something valuable such as an antique, painting, property or shares If you leave a gift to the Technion in your Will, it will not be included when valuing your estate for Inheritance Tax purposes. The value of your gift will be deducted from your estate before Inheritance Tax is applied, so it could reduce the amount of tax paid. We would really encourage you to discuss your Will and the type of gift you might like to leave to the Technion with a solicitor.

### There are two ways to write your Will:

### > Make an appointment to see your own solicitor



> Visit the Law Society

www.lawsociety.org.uk and click on the green "Find a Solicitor" button at the top of the page to find your local Wills and Probate solicitor

Writing a Will needn't be daunting and knowing that your affairs are in order can actually put your mind at rest.

Your solicitor will need our registered address and charity number:

### **Technion UK**

62 Grosvenor Street London W1K 3JF Registered charity number: 1092207

The Law Soc

# Israel has received five academic Nobel prizes, four of which are attributed to the Technion



Technion Nobel Legacy



## The Ubiquitin Revolution

The key to protein degradation

The 2004 Nobel Prize in Chemistry was awarded jointly to Technion Distinguished Profs. Aaron Ciechanover and Avram Hershko and their colleague Prof. Irwin Rose "for the discovery of ubiquitin mediated protein degradation." This prize marked Israel's emergence in the highest league of science and technology.

The ubiquitin discovery has opened a range of research fields, pharmaceuticals, and treatments in areas from cancer to neurodegenerative disorders.



### Quasicrystals

In April 1982, Technion Prof. Dan Shechtman observed a remarkable phenomenon - the formation of quasicrystals. The way was opened to the historic unveiling of a new class of matter, which won Shechtman the 2011 Nobel Prize in Chemistry.

In quasicrystals, we find the fascinating mosaics of the Islamic world reproduced at the level of atoms: regular patterns that never repeat themselves. It was a test of excellence, diligence, and selfconfidence, as the new class of matter observed by Shechtman was at first considered impossible within established science.





### Multiscale models

for complex chemical systems

Technion graduate Prof. Arieh Warshel received the 2013 Nobel Prize in Chemistry, together with Profs. Michael Levitt and Martin Karplus, for "the development of multiscale models for complex chemical systems."

Currently a distinguished professor of Chemistry and Biochemistry at the University of Southern California, Warshel earned his undergraduate degree at Technion, class of 1966 – the same year that Nobel laureate Dan Shechtman completed his BSc in Mechanical Engineering.



Traditional 2021 White Coat Ceremony the Technion Faculty of Medicine

## Put your faith in Israel's scientific and technological future.



Powering Israel's Future

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