



Wishing you a New Year of Peace and Hope



2016 SHANGHAI RANKING PUTS TECHNION IN FIRST PLACE IN ISRAEL

69th worldwide

Technion confirms its place in the list of the world's 100 leading academic institutions, according to the Academic Ranking of World Universities (known as Shanghai Ranking) published Monday, August 15th. Technion's overall ranking rose from 77th place in 2015 to 69th place, placing it highest among Israel's universities on the list.

Technion consistently scores high in the field of Computer Science (15th-18th place over the past five years). This year, for the first time, the Shanghai Ranking included a specific Ranking for Electrical and Electronic Engineering, in which Technion ranked 39th (the highest placement for an Israeli institution in that field).

"We are proud and pleased with this official recognition of Technion's prominent status in the global arena," said Technion President Prof. Peretz Lavie following the publication of the Ranking.

"This is the most important ranking in the world of academia, and this year it places us not only highest among Israel's academic institutions and in an excellent position globally, but also in a particularly impressive place in the field of electrical and electronic engineering, in addition to the high rankings in engineering and computer engineering.

Technion's consistent rise in the Shanghai Ranking proves that we are doing the right thing by investing unprecedented effort in recruiting the best faculty members and nurturing our students, who represent the best that Israel has to offer. Thus we are being proactive in fulfilling Technion's vision to be "A science and technology research university, among the world's top ten, dedicated to the creation of knowledge and the development of human capital and leadership, for the advancement of the State of Israel and all humanity."

Technion AT INNOVATIONS' FOREFRONT
Unlimited[®] FOR THE BENEFIT OF THE WORLD



Message from
DOREEN GREEN
National Chair

Lately, I have been thinking about my involvement with Technion and came to the realization that it has been a 30 year connection. So I ask myself, why is it that I still feel that same sense of passion and awe for this outstanding university.

I know that my initial feeling had something to do with my love of Israel, but it has grown into a great deal more. With each passing

year there has been something or someone that has strengthened the connection, both in Canada and in Israel.

There have been people here in Canada who have inspired me to want to be a part of Technion Canada and to work to reach out to others to become supporters - the founders of Technion Canada who saw the Technion in the early 1940's as the most important source of technological and scientific advancement of Israel; the visionaries like Mike Rand, who spearheaded the building of a graduate student's village; the leaders like Gary Goldberg, whose commitment to Technion is unwavering; loyal supporters like the Azrieli Family the Bloomfield Family, Syd Cooper, Seymour Schulich, Harry Sheres, Ike Wenger and Bill Wiener, just to mention a few.

At Technion, the faculty and students have always inspired me. I still feel the pride we all felt in 2004, when Distinguished Professors Avram Hershko and Aaron Ciechanover became Israel's 1st Nobel Prize winners in the Natural Sciences and then again in 2011 when Professor Dan Schechtman was awarded the Nobel Prize for Chemistry. I look forward each year to meeting Technion supporters and leadership at the Board of Governors Meetings led by Technion President Professor Peretz Lavie and BOG chair Larry Jackier. But to be honest, the most rewarding aspect of my involvement has been as the co-chair of the Student Affairs Committee of the Technion. These students have made me realize that anything is possible, when you have the passion for learning that they have, in an environment that both nurtures and challenges that passion.

This year at the Board of Governors meeting I had one of the most rewarding moments of my time with Technion, when I walked onto the campus and was greeted by my own grandson, Jonathan, who was spending the summer at Technion, as a Research Intern.

In reflection, it is for all of these reasons that I have remained involved with Technion. Every time this Institution has come up with some important research and I am convinced that it cannot out-do its last discovery, they top it and create a new standard.

How can one not be excited even after 30 years to see what the next 30 years will bring.



Message from
MARVIN OSTIN
National President

There never seem to be enough hours in the day for work, family and friends let alone giving time to a charity. But stop for just one minute and consider what getting involved in a charity can really mean.

You will meet new people with a variety of backgrounds who will broaden your

own horizons. In many cases, you will make new friends. Working as part of a team can be very rewarding and may also help you develop new perspectives on problem solving. The satisfaction you will derive from helping an individual or an organization move forward because of your knowledge or because you are part of the team.

Simply put, it can make you feel better as an individual.

Once you've made the decision to get involved, the next question is where. I would suggest Technion. Why?

The Technion – Israel Institute of Technology, the oldest Israeli university, offers degrees in science and engineering, architecture, medicine, industrial management and education. With 18 academic departments and some 50 research centres, it is often grouped with Stanford and MIT, universities that have played outsized roles in building their entrepreneurial ecosystems. Israel's movement, powered by Technion, is dubbed Startup Nation. The USB flash drive, drip irrigation, a Parkinson's drug, the Iron Dome air defense system, the data compression algorithm used in pdfs, and instant messaging are some of the inventions developed at Technion or by its alumni.

Want to get involved? Consider joining one of our National Committees e.g. PR, Finance, Endowment, Governance, Fundraising. You can also work with your local Technion Canada Council and help create awareness programs or a fundraising event in your city. You can let people know that you are supporting Technion by sending a tribute card in honour or memory of someone. Consider visiting the Technion yourself and experience the opportunity to explore world-class science and technology, and meet the people of the Technion, including world-renowned professors and brilliant students who are shaping the country's future. In short, share your special talents, skills and interests in helping Technion Canada to ensure the Technion's continued excellence and achievements.

For more information, please contact: Hershel Recht at 416-789-4545 or Anne Kalles at 514-735-5541.

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ONTARIO PREMIER KATHLEEN WYNN'S VISIT TO TECHNION

Premier Kathleen Wynne's five day Mission to Israel concluded with a visit to the Technion – Israel Institute of Technology. The Premier's delegation came to Technion to hear about three separate projects where the Technion and Ontario Institutions are already working on collaborative efforts.

The Premier was accompanied by the President of York University, Dr. Mamdouh Shoukri and VP Research and Innovation, Dr. Robert Haché for the signing of a Memorandum of Understanding between the two universities.

Since 2013, Technion and the Lassonde School of Engineering, at York University, have been engaged in cooperative efforts in a wide array of fields. Lassonde has hosted Technion Professors who have lectured and provided seminars to students on entrepreneurship and technology. The group toured the Technion Campus and met 18 of the Lassonde School students that are currently at the Technion for the third annual Lassonde School of Engineering's International Experience Trip.

Begun in 2014, the trip offers the Lassonde students an opportunity to spend three weeks in Israel experiencing the entrepreneurial eco-system, applying the venture creation process and learning while reflecting about themselves, and meeting people from many ethnically and religiously diverse backgrounds.

The Memorandum of Understanding will now open the door for expansion into new areas of research and collaboration in various engineering and scientific fields.

The Technion and the UHN's McEwen Centre for Regenerative Medicine led by Dr. Gordon Keller and the Munk Cardiac Centre's Dr. Barry Rubin are already engaged in a \$75,000,000 collaborative effort in the field of Regenerative Medicine. Started in 2013, this collaboration holds significant potential for the development of new cardiovascular devices and regenerative medicine therapies, innovations that will benefit not only residents of Canada and Israel, but the world. During the visit, UHN President Peter Pisters shared his thoughts on the collaboration. This was followed by a research update from Dr. Lior Gepstein, Head of the Laboratory for Cardiac Electrophysiology and Regenerative Medicine, Rappaport Faculty of Medicine. Prof. Gepstein is the leader of the Technion team in the joint venture between UHN and Technion.

Toronto Philanthropists, Gerald Schwartz and Heather Reisman were instrumental in supporting an incredible collaborative effort between the University of Waterloo and the Technion. Prof. Jean-Jacques Van Vlasselaer, Senior Advisor to the President – Strategic Initiatives, from The University of Waterloo discussed how the Technion-Waterloo Partnership is changing the way Quantum Computing is being conducted through joint research. Another area of collaboration is in the field of targeted drug delivery systems in the nasal area. Dr. Josué Sznitman, Director of the Technion Biofluids Laboratory and a member of the Technion's Faculty of Biomedical Engineering is part of a joint research project with Prof. Frank Gu, from the Faculty of Engineering at Waterloo and is also The Canada Research Chair in Nanotechnology Engineering.



Premier Wynne and Technion President, Prof. Peretz Lavie



Prof. Roy Kishony, Visiting Prof of Systems Biology, Harvard Medical School, Technion President, Prof. Peretz Lavie, Premier Wynne, Dr. Peter Pisters, President UHN



The Honourable Reza Moridi, Ontario Minister of Research, Innovation and Science, Premier Wynne, Technion President Prof. Peretz Lavie



TECHNION CANADA RECEIVES ACADEMIC PARTNER OF THE YEAR



L-R Hershel Recht and Janusz Kozinski

On behalf of Technion Canada, National Development Director, Hershel Recht, received a 2016 Lassonde Award from Founding Dean Janusz Kozinski.

Technion Canada has been recognized by Lassonde School of Engineering as Academic Partner of the Year in recognition of their continuing support of Lassonde's students through international academic opportunities.

For the past three years groups of Lassonde students have had the chance to take advantage of Israel's entrepreneurial environment by studying for a few weeks at Technion - Israel Institute of Technology. "As a result of our partnership with Technion

Canada, we have been able to provide Lassonde students with truly unforgettable educational experience in Israel. They are the entrepreneurs of tomorrow because of the many skills they have learned at Technion," said Janusz Kozinski.

During these international programs, Lassonde students meet with local entrepreneurs, learn what it's like to build their own start-up and experience the rewards and challenges of ventures first-hand.

The award was announced earlier this year at the second annual L'Oscars 2016 Lassonde Awards.

TECHNION SCITECH PROGRAM

Technion's summer SciTech Program combines scientific research along with cultural and social activities. It brings together outstanding students from around the world and is intended to challenge even the brightest students.



My name is Shauna Siegel and I am from Toronto, Ontario. I am 18, and I recently completed grade 12 at Westmount Collegiate Institute. I will be attending the University of Guelph for biomedical engineering in the fall.



I have always enjoyed going to school and learning. I am very passionate about biology and physics, and I also enjoy chemistry. When I heard about the opportunity at the Technion, I was very

excited that I would get to further my understanding of these topics while getting a real research experience before starting university. I think that the Technion offers a very unique experience to students. To be able to work in a lab while still in high school is such an amazing opportunity. I chose to apply to SciTech because it was an adventure that I could not say no to. I studied the effects of Ultra High Pressure Homogenization on the riboflavin concentration and the antioxidant capacity of milk.

The idea of going to the Technion for the summer was exciting for me. I had never been to Israel before, and I love meeting new people. To be able to travel across the world and meeting 60 other teenagers from around the world was a very intriguing idea.

In the lab, I learned basic lab skills that will help me in the future; as well I learned key principles about working as a research team. My team and I, along with our mentor worked fluidly and efficiently to get all of the work done. First, we took fresh unprocessed milk and homogenized it in pressures ranging from 50MPa-300MPa. We then took samples of it twice a day for about a week in order to obtain data at different shelf lives. After that, we performed a riboflavin test, using the centrifuge to isolate the water phase of milk and taking the riboflavin concentration in that phase. We also did an antioxidant test,

in which we diluted the milk and put it through a machine called the ORAC machine to test its antioxidant capacity. In the end, we learned that ultra-high pressure homogenization is actually more beneficial than pasteurization for milk processing. While the same amount of bacteria is killed, ultra-high pressure homogenization does not ruin the riboflavin and has a high antioxidant capacity. Without the intense heat that pasteurization puts on milk, proteins do not get denatured in ultra-high pressure homogenization resulting in higher protein content. Overall, our results were successful in finding a more novel way to process milk than pasteurization.

The highlight of this trip for me was meeting so many people from around the world. Every night after the labs, our amazing counsellors would run social activities for us, and on weekends we would go out and tour Israel. These evenings and weekends were experiences that I will never forget. From staying on a kibbutz in the North to going to Jerusalem, Masada and the Dead Sea, we saw a lot of Israel. I had never been, and I truly fell in love with it. I now have friends from all around the world, including America, Spain, Brazil, Israel, Nigeria, England, and China. Despite our distance, I can't imagine ever losing them.

I would recommend SciTech to anyone. It is truly a once in a lifetime experience.



TECHNION ALUMNI

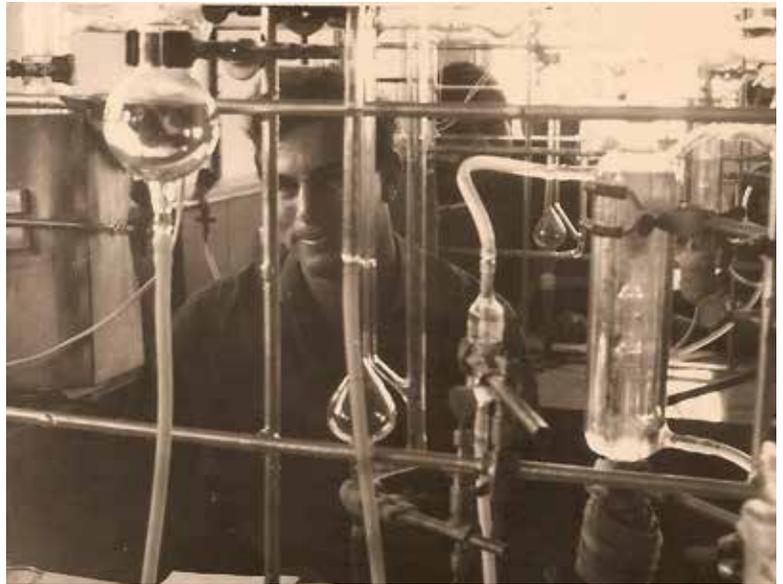
Thanks to the rigorous and broad-based education students receive at the Technion, its graduates go on to create high-tech start-ups, pursue novel scientific research and hold key management positions in companies across a variety of fields.

Today, Technion has over 90,000 graduates, and millions of scientists, students, entrepreneurs and citizens worldwide have been impacted by its work.

Technion Canada wants to enable you, as a member of this incredible group of alumni, to meet, network, share memories, create new ones, and stay connected to your alma mater.

Technion Canada's Alumni Committee in Montreal has been meeting to develop a list of Technion Alumni living in Montreal area. Alumni who will be contacted by a member of the committee to invite them to get involved - join the committee, attend an event, just get together and socialize. In fact one of the most enjoyable things about getting together is sharing memories and exchanging updates about what has happened in their lives since Technion as Meir Razi, shared some photos of his days at Technion.

If you are a Technion Alumnus and are interested in playing a role in developing a strong Technion Alumni community in Canada, contact Paul Raducan at paulrad46@gmail.com.



Technion Alumnus, Meir Razi, in the Technion Chemistry Lab in 1967

LEAVING A LEGACY GIFT

A gift with lasting meaning



Dr. Allan Stone died suddenly on July 28, 2016 in Owen Sound, Ontario.

Dr. Stone was born in Cleveland Ohio in 1944. He obtained his Bachelor of Arts degree from the University of California at Berkeley, and his medical degree from Case Western Reserve University, in Cleveland. Dr. Stone then moved to Toronto, Ontario to complete his medical training. For some years he had a medical practice in Meaford, Ontario, before moving to Owen Sound, Ontario.

Dr. Stone was a benefactor to programs in several universities and was a long-time supporter of the

Technion dating back to 1984. He and his brothers and sisters, who reside in the States supported several projects at Technion.

Dr. Stone's dedication to the continuation of top scientific research, as conducted at the Technion, was among his top priorities. Dr. Stone's bequest to the Technion will go specifically to assist the research he felt was most important.

A soft spoken man with a love for Israel and his own community of Owen Sound he will be sorely missed by those around him.

TECHNION CANADA ROSH HASHANAH CARDS

Technion Canada tribute cards let you share warm wishes with family and friends this Rosh Hashanah and provide a meaningful gift at the same time.



To ensure that your cards will arrive in time for Rosh Hashanah, please submit your order as soon as possible.

To send your personalized Rosh Hashanah greetings to family and friends and support Technion - Israel Institute contact Judy at 1-800-935-8864 or judy@technioncanada.org

Minimum donation for an individual card is \$18 or \$10 / card for orders of 10 or more.

TECHNION

BOARD OF GOVERNORS MEETINGS 2016

DR. SAM WEISS, OF CALGARY, DELIVERS THE CLOSING ACADEMIC LECTURE



Dr. Sam Weiss and Technion President,
Prof. Peretz Lavie

The closing academic lecture of the 2016 Technion Board of Governors Meetings was delivered by Dr. Sam Weiss, our friend and partner at the Hotchkiss Brain Institute, of the University of Calgary. Sponsored by the Adelis Family Foundation, this incredible presentation examined new methods of treating neuro-degeneration. Over the last 18 months, discussions have been held about solidifying and growing a tri-partnership between the Hebrew University, Technion and Hotchkiss. The idea being that by integrating the research of foundational scientists, clinicians who work with patients, technical experts and population health researchers, the HBI is going beyond scientific discoveries to improving lives. The HBI aims to achieve internationally recognized key discoveries and transformative clinical research in the neurosciences and mental health.

ACADEMIC AWARDS

UZI AND MICHAL HALEVY INNOVATIVE APPLIED ENGINEERING AWARD AND RESEARCH GRANT



Prof. Matthew Suss, Joel Rothman, Prof. Wayne Kaplan

Technion Canada takes special pleasure in congratulating Assistant Professor Matthew Suss on being awarded the 2015/16 "Uzi & Michal Halevy Award for Innovation Applied Engineering" for his research paper "Fluidized bed electrodes for dendrite-less flow batteries". The award was presented by Joel Rothman, Chairman of the American Technion Society and Prof. Wayne Kaplan, Technion Executive Vice President for Research.

Prof. Suss, who grew up in Montreal, directs the Laboratory for Energy and Environmental Innovations at the Technion. He obtained a BEng in Mechanical Engineering from McGill University, M.Sc. and PhD in Mechanical

Engineering from Stanford University. From 2010-2013, Matthew was a Lawrence Scholar at Lawrence Livermore National Laboratory and from 2013-2014 a Postdoctoral Associate in Chemical Engineering at MIT.

Currently, Matthew is an Assistant Professor, Horev Fellow and Alon Fellow at Technion, a team leader at the Israel National Research Center for Electrochemical Propulsion, and a leader in energy science at the Grand Technion Energy Program. Matthew is lead or co-author on 17 submitted or published papers, lead or co-inventor on 6 patents.

COOPER AWARD FOR ACADEMIC EXCELLENCE



Prof. Amir Yehudayoff, Doreen Brown,
Prof. Hagit Attia

The Cooper Award for Academic Excellence was created through the generous donation of Dr. Stephen Cooper of Pembroke Ontario.

The 2016 award was presented to Professor Amir Yehudayoff of the Faculty of Mathematics and to Professor Eran Yahav of the Faculty of Computer Science. The presentation was made by Prof. Hagit Attia, Technion Executive Vice President of Academic Affairs and Doreen Green, Chairman of Technion Canada.



Prof. Eran Yahav, Doreen Brown, Prof. Hagit Attia

TECHNION

BOARD OF GOVERNORS MEETINGS 2016

EXERCISE EQUIPEMENT DEDICATION

Before a gathering of family and friends, Ronnie (Technion Canada Alberta Regional Director) and Dvora Kaplan, of Calgary, were honoured during the dedication of an Exercise Park in memory of Ronnie's late brother Avraham z'l. Physical fitness is an important part of the student experience and the new equipment is one of many exercise areas around the campus, will be greatly appreciated by both the Technion student body and staff.



L-R Technion Alumni, Ronnie and Dvora Kaplan, Prof. Morris Eisen, and Prof. Boaz Golany



Ronnie Kaplan



WIND TUNNEL RENOVATION



Leesa Steinberg in the Wind Tunnel Control Room

L-R Marvin Ostin, Doreen Green, Leesa Steinberg & Melissa Singer

Prof. Boaz Golany, Technion VP, External Relations and Resource Development and Leesa Steinberg

Wind tunnels are used to test new shapes and materials in different flight scenarios and to better understand how objects move through the air at various speeds, heights, and other conditions. Testing objects in wind tunnels during the design and development stages can help researchers improve the engineering design and development of aircraft, aircraft parts, and various airborne and flying objects that are crucial for Israel's defense systems. Wind tunnels are also used in

aerodynamic research combined with theoretical analysis. Hence, the Technion which possesses Israel's only University based Wind Tunnel was in need of renovation of its control room. Congratulations and a sincere thank you to our Board Member and friend, Leesa Steinberg of Montreal for her very special gift for the renovation of the Wind Tunnel Control Room in the Faculty of Aerospace at the Technion.



The future of Israel is in high-technology and the future of high-technology in Israel is at Technion.

TECHNION TRIUMPHS

ISU Space Studies Program 2016



The Technion was proud to host the 29th Space Studies Program (SSP) of the International Space University (ISU), which took place during July – August 2016 in Haifa.

Each summer, the SSP convenes in a different location around the world. It brings to the host site about 250 participants constituting the present and future of the world space business. In recent years, the SSP was held in Ohio, USA (2015),

Montreal, Canada (2014), Strasbourg, France (2013), Florida, USA (2012), and Graz, Austria (2011). The SSP program has some 4,000 alumni from over 100 countries, including Israel.

Hosting the prestigious SSP in Israel was a unique opportunity to showcase Israel as a dynamic and diverse nation, a leader in science, high-tech, and innovation on the one hand, and a country of fascinating historic, religious, and natural attractions, on the other.

Technion Canada is proud that the TTT Fund was a significant supporter of the program, consistent with their previous support of other space and satellite related research.

Buzz Aldrin Delivers Lecture at the Technion during the International Space University



Buzz Aldrin, most famously known as the second man to walk on the Moon is hands-on with the next big dream: humanity's next big frontier – getting people to Mars.

At Technion, on July 28, 2016, the 86-year-old space

man addressed the 2016 class of the International Space University, sharing his experiences as an astronaut and his mission not only to fly people to the Red Planet, but also to “maintain a permanent human presence on Mars.”

“There’s no greater endeavor that humanity will undertake for generations to come than to create a permanent presence on another planet in the solar system.”

Recalling the impact of the Apollo 11 mission to the Moon, he said

that, “The world welcomed us back as heroes. But we understood that they were [not] just cheering for three guys. It was what we represented: a nation, and the world coming together. We had accomplished the impossible and the true value of Apollo is the amazing story of innovation and teamwork that overcame many obstacles to reach the Moon.”

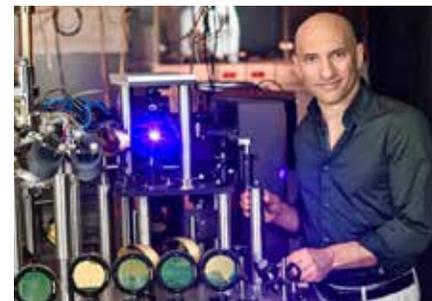
Technion International Enters Fifth Year



The fourth class of Technion’s International BSc Program in Civil and Environmental Engineering graduated on August 4, 2016.

The 15 members of the Class of 2016 are nationals of Nepal, Turkey, the USA, Venezuela, Canada, China, Israel, Spain, and Germany. Two of them, Mona Kolgasi and Timothy Neshet, said that “despite the fact that we came from all over the world and from different cultures, we became a family. This is one of the most significant moments of our lives. From now on we are engineers, and as engineers we must always think about how to improve the world and leave our mark on it.”

Technion Findings Describe First Observation of Hawking Radiation in Any System



The eminent British scientist, Stephen Hawking, made predictions, 42 years ago, about elusive radiation emanating from black holes.

Known as Hawking radiation, this phenomenon is too

weak to observe with current techniques, and remained a “holy grail” for the fields of atomic physics, nonlinear optics, solid state physics, condensed matter superfluids, astrophysics, cosmology, and particle physics. It remained as such until Prof. Jeff Steinhauer’s observations of Hawking radiation in an analogue (model) black hole created at his Atomic Physics Lab in the Technion-Israel Institute of Technology Faculty of Physics.