



IIPE MANUFACTURING NEWS

Editor-in-chief
Dr. K. Gopalakrishnan

Monthly Newsletter of the Indian Institution of Production Engineers

Editor: Dr. M. S. Ganesha Prasad, Professor & Dean, Dept of Mech Engg, NHCE, Bangalore

Prof. R. M. Vasagam, National Chairman, IIPE

Dr. Wooday P Krishna, National President, IIPE

Vol. 06

Issue: 02

Annual Subscription: Rs. 60

June-July 2019

Inter-Collegiate Students' Project Exhibition **TECHORIZON 2019**

Mr. O.P.Khanna, Chairman, Needy Heart Foundation and Former National Chairman, IIPE has inaugurated the Annual Inter-Collegiate Project Expo and Conference "TECHORIZON 2019" on 27th April 2019 at New Horizon College of Engineering. As in the preceding year, it has created lot of interest and enthusiasm, growing consistently among budding engineers, year after year. Being a National Event, this provides a unique inter-disciplinary platform for creative young engineering talents to show case their innate ability, when they are in their final year of their study and wish to demonstrate their skills to develop products or systems based on their academic pursuits which may lead to their own startups. Final Projects being part of academic requirements foster creativity and fuel their innovative skills leading to frugal innovations at engineering campuses across the country!



L to R: Dr.M.S.Ganesha Prasad, Editor, IIPE Manufacturing News, Dr.K.Gopalakrishnan, national Secretary, IIPE, Dr.Manjunatha, Principal, NHCE, Dr. K.R. Venugopal, Vice Chancellor, Bangalore University, Mr. O.P.Khanna, Chairman, Needy Heart Foundation, Dr.C.S.R.Prashanth, Dean (Academics) and Dr.R.J.Anandhi, HoD, Dept of ISE

It was an interdisciplinary Expo and participants from various engineering department across Karnataka has played their active role and keen to demonstrate their capability not only from NHCE but also from all the leading institutions in Bangalore and outside. Mr. O.P.Khanna has highlighted the need for such evnts and strongly believed that Techorizon has provided platform to promote, and commercialize indigenously developed technologies, that too developed by students of Engineering Institutions and Universities and also provide opportunities along with services including the filing of patents in India or abroad etc in future. Bangalore University VC, Prof. K.R.Venugopal, was the Guest of Honour stressed the need for continous learning and hoped in future NHCE will support all prospective student project ideas in Technology Readiness Level (TRL) 1-2 to Prototype Development at TRL 7-9 and then commercialization with entrepreneurship/ startups and also providing all necessary facilities at NHCE.

Techorizon 2019: Inter-Collegiate Project Expo!

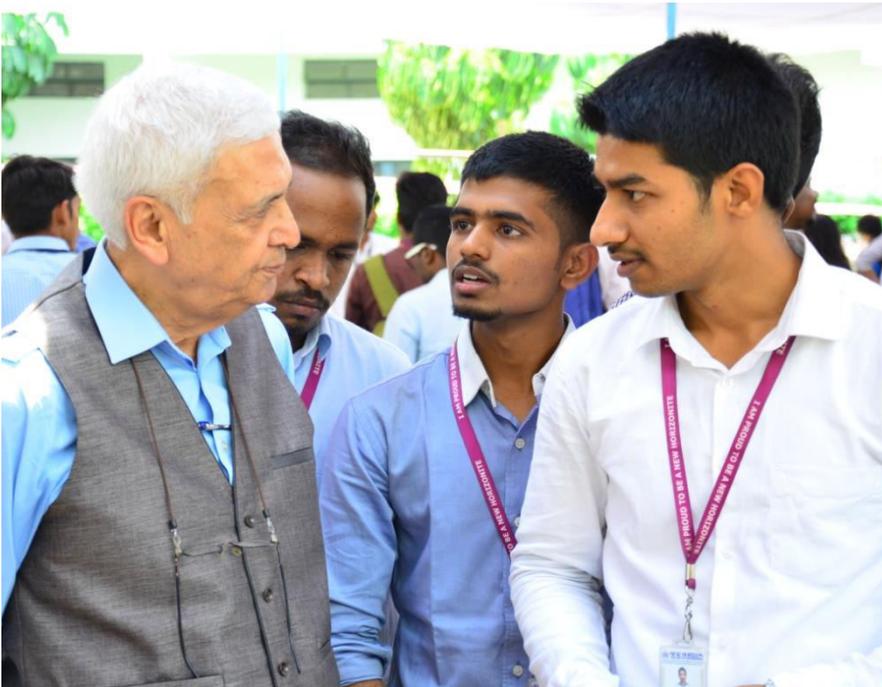


Glimpses of Inauguration of TECHORIZON 2019

Mr. O.P. KHANNA has been felicitated during Techorizon 2019 for Saving 8000+ Live!



Mr. O. P. Khanna as Chairman, Needy Heart Foundation has been instrumental for helping 8000+ Cardiac Surgeries done free of cost for the needy people predominantly Children. He was felicitated for his professional and social services during f Inauguration of TECHORIZON 2019 on 27 April 2019 at NHCE, Bangalore by IPE, Indian Technology Congress Association and University Space Engineering Consortium (UNISEC) India.





Organizational Matters of IIPE



वेदः कर्मसु बीजात्मन्

Indian Institution of Production Engineers

Making of IIPE Local Centres and Students' Chapters

- IIPE Kakinada Chapter: Dr. Lingaraju Dumpala,**
 Asst Professor, Department of Mechanical Engineering, Associate NCC Officer, UCEK, Coordinator DFUR, JNTUK , JNTU KAKINADA, Kakinada-533003, Andhra Pradesh
- IIPE Namakkal Chapter: Mr. R.Prabu,**
 Assistant Professor, Department of Mechanical Engineering, Mahendra Engineering College, Salem-Tiruchengode Highway, Mahendhirapuri, Mallasamudram West, Namakkal-637503, Tamil Nadu
Inaugurated Students Chapter of IIPE on 04.03.2019
- IIPE Kolkata Chapter: Mr. Subrata Sarker**
 Head of Manufacturing Engineering, Tractors India Limited, 1, Taratolla Road, Garden Reach, Kolkata 700024, West Bengal. OEM Heavy Engineering Equipment Manufacturer
- IIPE Hyderabad Chapter: Mr. CH.V.SatyanarayanaRaju, Scientist and Mr. K.N.Vamsi Krishna**
 Research Centre Imarat (RCI), DRDO, RCI Road, Vigynana Kanchar, Hyderabad-500069, Telangana



IPE Chapters interested in Launching Their Own Satellites or to establish the UNISEC India Chapter at Their Institutions can contact: Dr. K. Gopalakrishnan, National Secretary, IPE at profgoki@yahoo.com or M: 98451 73730

India- Israel Partnership

- Innovation, Robust Technology Base, Disruptive Technologies
- Academic Research to Products and Solutions
- Approach to Outreach Educational Programmes – Industry & Institute
- Mastered in Space Technology
- Strong in Communication, Observation Science and Education
- International Co-operation, Bilateral Agreements with India including Student
- Exchange Programmes and Joint Projects
- Funds - Grants, Soft Loans etc

How Institutions Can Engage

- Build Strong “Space Technology” Competencies
- Hands on Development Experience- Students and Faculty Members
- More Industry Interaction (Real Time)
- State-of-the-art Technology Interventions
- Create New Job, Start-ups and Incubation facilities
- Nurture Future Space Engineers/Scientists
- Technology Demonstration - S&T Research
- Support Education Outreach
- Make Students Future Career Ready

UNISEC India: Secretariat @ 4th Floor, #3, First Main, BDA Layout, Kodihalli, HAL 2nd Stage, Bengaluru – 560008, Karnataka, India; **Contact Info:** +91 80 6559 2501, +91 80 4850 8380; Website: www.unisec-india.in

First Announcement

techcongress.net

7th Indian Technology Congress

Human Digitalization: Future Intelligence



4-5 SEPTEMBER 2019

**NIMHANS Convention Centre
Bengaluru, India**



www.iipeonline.org

Printing and Published by: Indian Institution of Production Engineers, NHQ,
117, 3rd Main, 3rd Cross, BEML Layout, Basaveswara Nagar, Bengaluru-560079

Niti's new road map: Only electric vehicles to be sold after 2030

By Dipak K Dash , TNN| Jun 18, 2019, 10.36 AM IST



Highlights

- NITI Aayog has proposed that only electric vehicles should be sold after 2030, expanding the scope of the clean fuel technology beyond two- and three-wheelers
- Transport minister Nitin Gadkari - who had once threatened to mandate EVs from 2030 - said that the roadmap will be decided after consulting the auto industry

Read more at:

[//economictimes.indiatimes.com/articleshow/69836543.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst](https://economictimes.indiatimes.com/articleshow/69836543.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst)

The government's think tank NITI Aayog has proposed that only electric vehicles should be sold after 2030, expanding the scope of the clean fuel technology beyond two- and three-wheelers.

Earlier, a panel headed by NITI Aayog CEO Amitabh Kant had suggested that only electric-powered three-wheelers and two-wheelers with engine capacity of up to 150 cc should be sold from 2025... [Read more at above link](#)

Manufacturing, Infra to add 58,200 jobs in April-September FY20

According to TeamLease Services biannual 'Employment Outlook' report for April-September FY20, these industries will witness a 2 per cent increase in net employment.

PTI| Jun 17, 2019, 08.01 PM IST [Read more at below link](#)

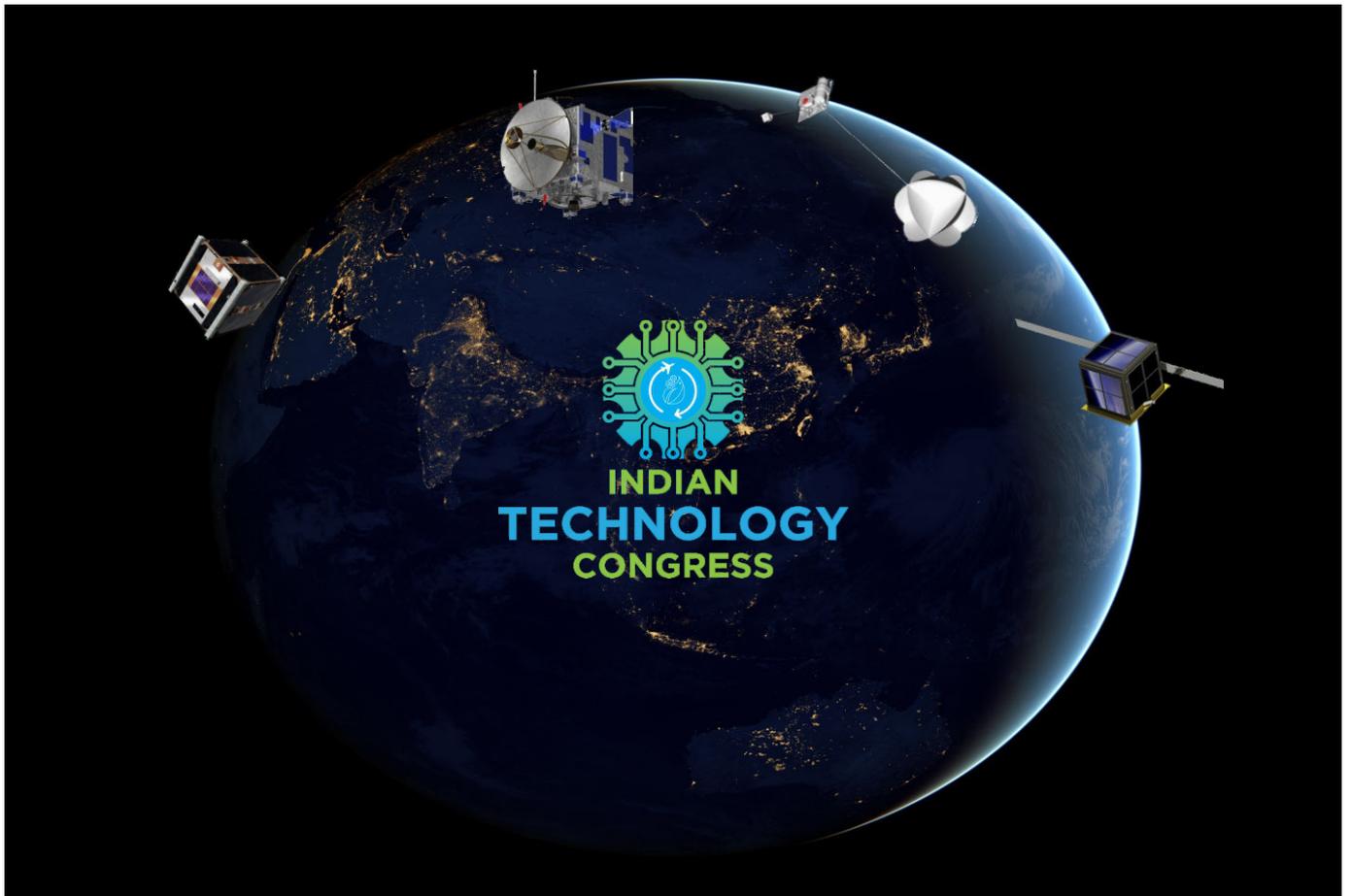
<https://economictimes.indiatimes.com/news/economy/indicators/manufacturing-infra-to-add-58200-jobs-in-april-september-fy20/articleshow/69828982.cms>

Indian Railways considers inviting private firms to run trains on some routes

To begin with, the railways will experiment by offering two trains to its tourism and ticketing arm, IRCTC, to operate.

By Dipak K Dash , TNN| Updated: Jun 19, 2019, 09.13 AM IST [Read more at below link](#)

<https://economictimes.indiatimes.com/industry/transportation/railways/indian-railways-considers-inviting-private-firms-to-run-trains-on-some-routes/articleshow/69851483.cms>



Insight Report
First International Delegation

10-15 February 2019, Israel

Indo-Israel SpaceTech Leadership Programme



<https://itca.org.in/satellite.html>



RAMONchips



Ben-Gurion University
of the Negev





**Indian
Technology
Congress
Association**

L.V. Muralikrishna Reddy, PhD, FIE, IntPE
President

8 February 2019

Dear Friends,

With New Year underway, I wish you, family and the research teams continued success!

I congratulate each of you for being a part of this first-ever **Indo-Israel Space-Tech Leadership Programme**. Through this class of uniquely structured programmes, the value proposition ITCA intends to deliver to participants is building actionable synergy between Space-Tech practitioners and aficionados across the world. **ITCA's global partners and leaders in Space Technology** would support realising your vision to explore new-space prospects for student-built satellites at your institutions.

75 Student Satellite Mission 2022 is envisioned to usher in a new paradigm of student satellite development programme/s on the foundations of experiential learning, backed by veteran collaborators with an established track record of success in the similar projects. The consortium together with you congregates the best available expertise across cross-border technologies required to identify a path-forward for small satellite development missions by Indian academia.

The visit to Israel will give you a perspective of space technologies developed by the institutes/universities of that country, and facilitate participants to establish similar such successful satellite missions. I am confident that this immersion programme will bring to light that the nation's and societal progress has been based on a high-performance innovation ecosystem that has been nurtured by the Israeli universities by successfully integrating the multi-disciplinary techno advances.

ITCA will continue to work with its Institution partners to bridge the gap between industry and academia through international intellectual collaborations that foster an environment for networking and enhanced participation experience. Together, along with the partners of consortium, we are confident that, we can harness the incredible opportunities that the country Israel is providing in Innovation and Space Technologies.

I wish you great success during your customized multi-disciplinary immersion visit to the Land of Continuing Frugal Innovation and Technology Leadership-ISRAEL.

With warm regards,

Yours sincerely,

(L.V. MURALIKRISHNA REDDY)

Indian Technology Congress Association

#3, First Main, BDA Layout, Kodihalli, HAL 2nd Stage, Bengaluru - 560 008.

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“75 Students Satellites: Mission 2022”, an initiative of ITCA is a visionary programme shaped in the chronicles of Indian Technology Congress. The progress is incredible in a short period, and it's growing momentously on the road to establishing a new national identity. I congratulate all participants as international delegates at the first ever exploratory visit under Indo-Israel SpaceTech Leadership Programme. Hope you all assimilated the glimpses on technologies associated with the lifecycle of small Satellite development.

Prof. R.M. Vasagam

Vice President
Indian Technology Congress Association

Space-Tech Programme

A half day Conference on India – Israel Bilateral Space Tech Cooperation for Small/Nano Satellites Mission

Israel Space Agency

Elbit Systems ISTAR

Tel Aviv University

Technion (Israel Institute of Technology) - Asher Space Centre – International Space University

Herzliya Science Centre – High School Student Satellite Development Programme

SpaceIL

Ben-Gurion University

The members of the Indian Delegation, Israeli Organisation, and ITCA Secretariat

I sincerely appreciate all your contributions in developing this fascinating, comprehensive document in the form of INSIGHT REPORT.

Dr. K. Gopalakrishnan

Secretary General
Indian Technology Congress Association

Engineer Your Satellite Launch

Indo-Israel Space Tech Leadership Programme

In September 2018 during **6th Indian Technology Congress** at Bangalore, representatives of Academia, Space-Industry and R&D conglomerated to deliberate on the advancement of student-built satellites across the world. The inking to this initiative is to reinforce Space-Tech competencies in Indian Institutions and Universities by adopting best practices followed at prevalent international organisations. The outcome of the deliberations conclusively emerged in establishing a consortium **“75 Students Satellites: Mission 2022”**. To develop a framework for accomplishing the mission objectives of the consortium, ITCA initiated collaborative efforts with Israeli Space institutes for capacity building through training and exploratory visits. The envisioned visits expected to enhance the understanding of design parameters and system engineering concepts for launching and deploying the small satellites. In this context, the **first international Indo-Israel Space-Tech leadership programme** is designed and organised during **10-15 February 2019**.

The scientifically designed exploratory visit to Space Industry, R & D establishments and Universities in Israel facilitated significant acquaintance of small satellite development, insights of best practices and captivating collaborative openings besides funding opportunities. A twenty-member delegation from nine engineering institutions visited Space-organisation of Israel for progressing their institutional missions in developing the small satellites by students.



75 Students Satellites: Mission 2022

Student Satellites gained prominence globally and has emerged as a trend to build experiential learning and demonstrate enhanced practice-based outcomes in engineering institutions. Indian Technology Congress Association (ITCA), a platform for technology adherents working to stimulate multi-disciplinary capabilities in tomorrow's workforce is actively partnering with Academic Institutions, Industry, and Research Labs to conceptualise, develop and launch a distinctive programme of "75 Students Satellites: Mission 2022" in the consortium model.

The inspiration for this activity is the democratisation of space that is taking place thanks to the advances in multiple domains and the miniaturisation of components and systems. For a nation that is growing at a fast pace, student satellite mission presents a unique opportunity to develop innovative public-private partnerships to enhance education at all levels.

Partnering Institutions of this mission are expected to enhance student skills, employability, International technology culture, entrepreneurship mind set through start-up and collaborative incubations within Institution in partnership with Industry & R&D Organisations. These transferable skills can be utilised by students to achieve success in any engineering projects they would be involved in during their extended career.

ITCA's Initiative

Competency Building Programme to Develop Student-Built Satellites

The scope of the exploratory visits is to adopt best practices for building the credence of Indian Academia that the student satellite development initiatives can be successful and protect the investments made by stakeholders. This inter-disciplinary programme would also help to build global alliances for knowledge-based institutions to establish linkages with best-of-class international institutions and organisations. The blended study visits will as well augment Indian Academia's research and development facilities precisely in space-tech by attracting Israeli diaspora of institutional enterprises.

Glimpses of First & Second International Programmes on
75 Students Satellites: Mission 2022
September 2018 & November 2018, Bengaluru



Conference on India – Israel Bilateral SpaceTech Cooperation for Small/Nano Satellites Mission

The Grand Beach Hotel, Tel Aviv, 11 February 2019

To welcome the delegates of the Indo-Israel Space-Tech Leadership programme and to provide an orientation of the visit, half a day conference has been prearranged keeping the focus on India-Israel Bilateral SpaceTech Cooperation for Small/Nano Satellites Development. The highlights of the conference are on New Space Economy and the role of Israeli space programmes and how the countries Innovation Strategies equipped. The agenda as well covered on the mission of 70 CubeSat programme of Israel and ITCA's 75 Students Small Satellites: Mission 2022 of India. The four eminent speakers highlighted on a variety of Space applications and satellites systems counting technologies, policies, applications etc.

Professor Chaim Ershed

Chairman, Space Committee, Ministry of Science, Technology, Israel
Co-Founder and Member, Israel Space Agency and
Founding Director of Space Defence Programme, Israel

Dr. Meir Ariel

Director, Herzliya Science Center and
Director, Nanosat Center, The Tel Aviv University

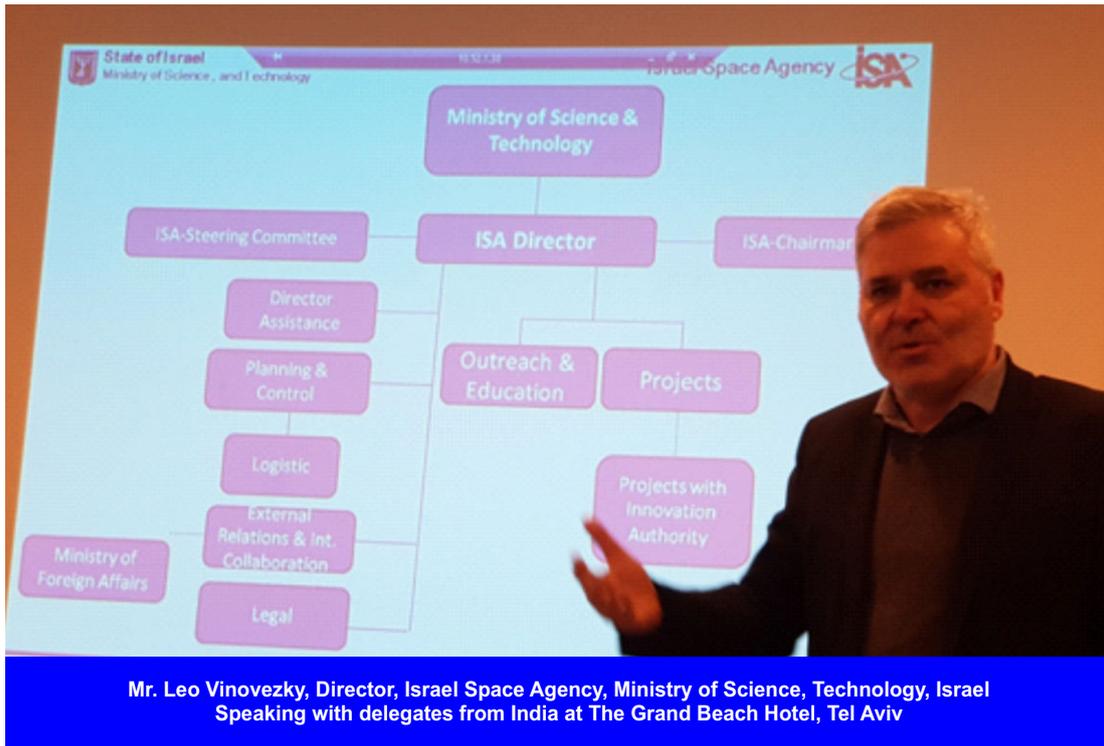
Mr. Leo Vinovezky

Director of Department-In Charge of
External Relations & International Collaborations
Ministry of Science & Technology Israel Space Agency

Mr. Elad Sagi

Chief System Engineer - Israel 70
Herzliya Science Center





Mr. Leo Vinovezky, Director, Israel Space Agency, Ministry of Science, Technology, Israel
Speaking with delegates from India at The Grand Beach Hotel, Tel Aviv

Highlights

First privately funded lander on the moon BERESHEET. Bring the future NOW.

Supporting space industry- Incubation and Startup's

Expanding basic research and infrastructure in academia

Israel global presence in space capabilities

Education, community development and research enhancement

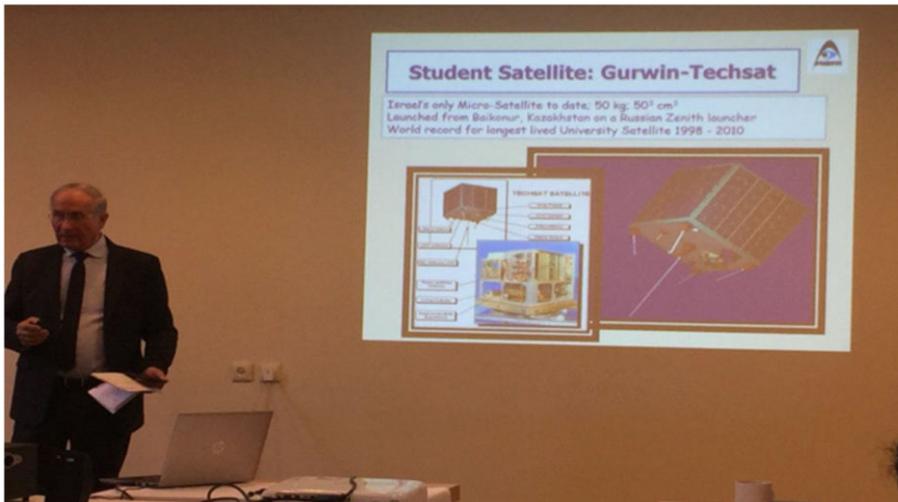
Mr. Leo Vinovezky emphasised on Israel SpaceTech Cooperation among regions mainly with the ISRO India and the NASA USA. The ISA is working on emerging applications in agriculture, water conservation and climate change in partnership with institutions and schools among the age group of 15 years. He reiterated that Israeli governments vision in the furtherance of the students' space-tech skills for the future workforce.

There are more than 60 SpaceTech industries are based in Israel, of which at least 7 to 8 Companies are contributing their space-tech products to the international space station through Industry, customers (governments) and academia ecosystem. They have ongoing space-tech cooperation with – European Space Agency at both academic and governmental purposes. ISA is also working with emerging space tech countries, and they have initiated programmes with Polish Space Agency (POLSA) and the Mexican Space Agency. Mr Leo Vinovezky also extended possible cooperation for student satellite development in India.



Dr. Meir Ariel, Director of Herzliya Science Center & Director, NanoSat Center, The Tel Aviv University, presenting framework on 70 Student CubeSats (Small Satellites) Mission, Israel

Dr. Meir Ariel enlightened the concepts of CubeSats - the miniaturisation and standardised systems including the ongoing global space research. He also overviews the current trends of CubeSats as training tools for Engineers. The new space also included the development of Constellation of 70 CubeSats in Israel with a concise framework, as a national programme focused at high schools. Dr. Ariel is keen in developing the New Space Technology functional models with the ITCA Space Tech Consortia; this will enable the enthusiastic students/faculty under SpaceTech Leadership and Competency Programme to have a better understanding and skills required to continue their higher education in space technology, entrepreneurship and



Prof. Chaim Ershed, Chairman, Space Committee, Ministry of Science, Technology, Israel discussed on Creativity and Innovation in Israeli Space Programme



Prof. Chaim Ershed presented on Creativity and Innovations in Israeli Space Programme. He highlighted on Ofeq, the most successful Israel Satellite System. How Technological intelligence, organisational intelligence and artificial intelligence shaped the Israel Space Programme for a variety of applications also explained.

Insights of Israel Space Programme from 1969

Space Infrastructure in Israel

The launch controls from Israel

Israel Past, Current and Future Space Missions

Technology Trends "Wisdom of the Crowd"



Systems Engineering in Nano-satellite Development

Simplified Project Life Cycle's – NASA and ESA

Mission Requirement Process

Preliminary Design Review / Critical Design Requirements

Integration/ Launch Requirements

Phase D- Part 1 Qualification and Production, Part 2 Integration, Flat Sat



Mr. Elad Sagi, Project Manager, Ministry of Science, Technology, Israel presenting about Nano Satellites Development Project

Mr. Elad Sagi deliberated on the standards required for the small satellite development and focus on the New Space technology emergence. Also extended support to India's Student satellite development missions. Mr. Sagi discussed on Systems Engineering concepts and design concepts in nano-satellite development.



Mr. Arie Leizer, Chief Space Systems Engineer, Elbit Systems ISTAR with ITCA Delegation

Mr Arie Leizer made presentations by showcasing their capabilities and technical know-how of their unique space-tech products which widely used in Space, Defence, Homeland Security including commercial applications all over the world.

High-End Telescope, Jupiter and Neptune
Elbit System Intelligence and Electro-Optics (ELOP)
Space Cameras- ERMS and EROS
Thermal Imaging Capability
Training and Simulations

The product line of electro-optic based solutions for Space, defence and naval systems which include laser and thermal imaging systems. Manufacturing of high-resolution cameras that serves satellite imaging purposes. High Spectral resolution cameras for satellite application for land and oceans- SHALOM is Elbit exclusive technology. The delegation visited and explored Daniel Laboratory of ELBIT to understand the dynamics of Thermal Vacuum Chamber, Clean Room and prototypes of highly valued telescopes.



Visit to Tel Aviv University, Pursuing the Unknown

Dr Meir Ariel initiated the tour of Tel Aviv University, providing their historical background. His key initiatives on nanosatellites as well as part of the two major projects undertaken by the Department of Environmental Science.

New Space CubeSats

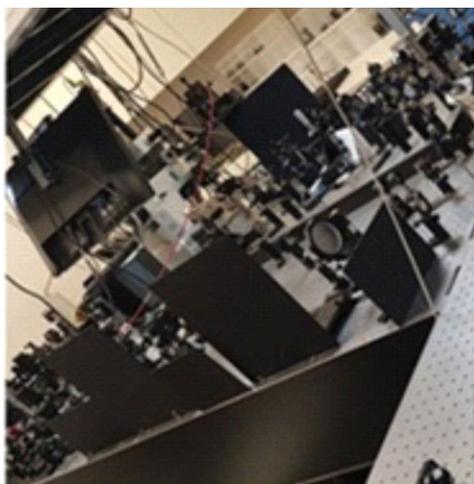
The New Space CubeSats focused on SDGs 2030 solutions for space applications creating and development of satellite and space technologies as a national goal, these initiatives may be monitored with the submissions for agriculture, water conservation, clean-smart cities and dumping for the municipalities.



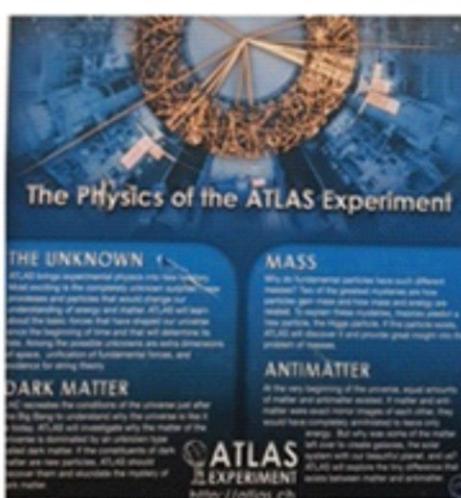
Professor Colin Price, Porter School of the Environmental and Earth Sciences, Tel Aviv University and Dr. Meir Ariel with ITCA Delegation during the walk the talk tour of Tel Aviv University

Prof. Colin Price discussed the primary objective of their programme based on Sustainable Development Goals of the United Nations (SDG 2030). He gave a brief introduction on Nature Ventilation, Passive Design, Water recycling, Solar tube technology, Sustainable Development Goals 2030, Purpose of Satellites and NanoSats. The participants also were given a tour to the green building in Tel Aviv University where Nano Satellite centre also located. Satellite application including Industry 4.0, Smart City and Transportation Innovation also discussed.

Space Applications Perusing by Tel Aviv University Complimenting SDG 2030 Objectives



- Reduction Poverty
- Air Pollution
- Oil Spills
- Clean Energy- Climate Change
- Deforestations (Improvements and Monitoring)
- Space Weather for the Satellites, Solar Flares on the Satellites, Airplanes, Electric Lines and Power Grids



Prof. Dan Maoz, Chairman of the Sackler School of Physics and Astronomy briefed about his research activities on gravitational lenses on search and characterization of extrasolar planets via microlensing, galaxy clusters. He demonstrated few techniques in his lab, he and his team have constructed the multimillion dollar lab on their own with no technical expertise from any other international experts or institutions in TAU.

Visit to Technion- Israel Institute of Technology

Professor Giora Shaviv

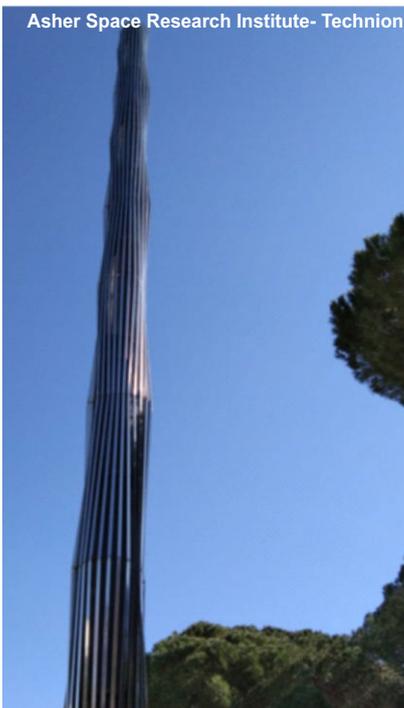
Advisor, The Irwin and Joan Jacobs Graduate School, Technion

Applications of Nano Devices on Nano-Satellites

His discussion was on the spectral dispersions on Signal to Noise Ratio (SNR), the formation of longer spectral lines and shortest spectral lines that required for the satellite image sensing. They are working on the development on the spectral lines for transformations to Infra-Red spectrum range.



Prof. Giora Shaviv and Prof. Pini Gurfil with the ITCA delegation at The Asher Space Research Institute



Asher Space Research Institute- Technion



Prof. Pini Gurfil
Head, Asher Space Research Institute, Technion

New Space Technologies

The Institute is working mainly on sciences, engineering, and education for the outreach programmes for international students. Organised short campus tour, followed by lab visits in space centre, having a Vacuum chamber for testing, clean room, small prototype models etc. significant small satellites developed including TechSat 2, launched in 1998 weighing 180 kilograms, Samson was the latest cubesat in 2019, which is 3x6U focused on cluster flight, geolocation and propulsion. The upcoming launches include DriveSat in 2020 – 2U with new RW VAT micro-propulsion.

Recent, research and development accomplishments on integrated parts involved in satellite and different architectures, models in various stages of development. Camila Hall Thruster most efficient hall thruster for 150W, pseudo-atomic clock and electric propulsion (high-velocity thrusters) which is the best in the world and the nanosat-reaction wheel. Their space tech labs are also leaders in testing space flight components and geostationary components



Laboratories at Asher Space Research Institute

Ran Ginosar, PhD CEO, Ramon Chips

The company mainly develops software and the processors for the satellites, the company mission is tech innovation, they also develop off-self tools, and also they have their own suite of Ramon Tools. The manufacturing facilities are based in Taiwan along with hardware testing. The software testing is done mostly on their campuses in Israel.



Ran Ginosar, PhD, CEO, Ramon Chips with ITCA Delegation

@ Herzliya Science Centre (HSC)

School Students built Satellites and Successfully launched @ HSC. More than Four Years the Satellite Served in Orbit



Centre for Nano-Satellites development Duchifat-1 which is 1U successfully launched as first school student satellite from Israel, on the Russian spacecraft and the second HOOPE developed with the assistance EU QB 50 Project mission the launch was at the orbital at 90-400 km. Duchifat-2 is in orbit since last four years. Currently, Duchifat 3 payload for imaging is under development. They are developing TEVEL a constellation of Nano Satellites to be launched. HSC has developed effective ground station and clean room for their Nano Satellite Projects, their students also briefed their value-adds to the Nano-Satellites end to end development, testing to the launch and monitoring for HSC ground station. HSC, Nano Satellite syllabus is part of the curriculum in all Schools of Israel. Dr. Meir Ariel is the Managing-Director, and assured that they will provide entire technical support in every step right from training to establishing labs for ITCA Space Tech Consortia.

Mr. Kfir Damari Founder, SPACEIL

The company was founded nine years ago, two of their founders are from HSC, started as non-profit volunteering organization that promotes science to the public especially space science. They were working for Google lunar prize, due to time constraints and targets with Google lunar prize, and they opted for funding from the organisations and individuals. The total money they raised is 700 crores. Now, they are ready to land an unmanned rover onto moon, within next 6 days. The launch for the Lunar Lander is on 21 February 2019, which will be launched from the US.



Photo Courtesy: SpaceIL

Mr. Kfir Damari, Founder, SpaceIL on 20 February 2019 getting ready for BERESHEET launch in Cape Canaveral, Florida



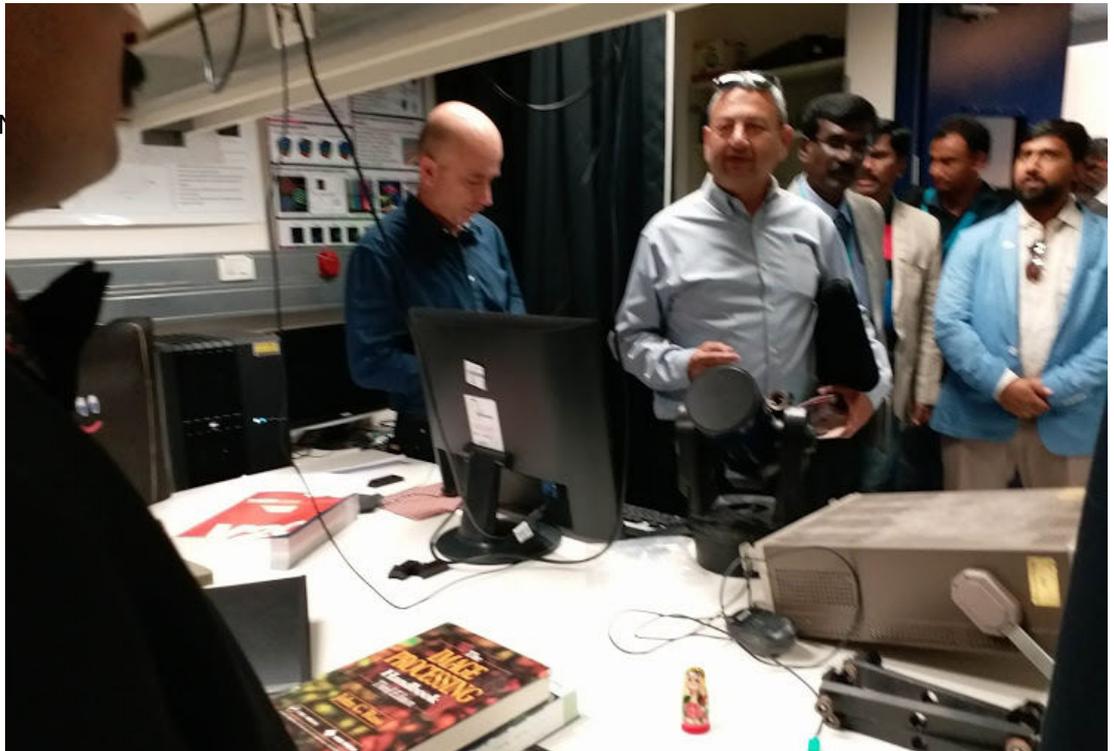
Visit to Ben Gurion University of the Negev

Dr. Dan Blumberg

Vice-President and Dean
Research and Development
Ben-Gurion University of the Negev

Earth and Planetary Image Facility

Prof. Dan Blumberg briefed about Ben Gurion University and introduced a few faculty members. Ben Gurion University has partnered to establish Advanced Technologies Park. And their applied research in specialised areas includes remote sensing and small satellite. The visit to ILSE KATZ Institute for Nanoscale Science and Technology within the same campus, optics lab ongoing research involving spectrometers for small satellite cameras.



Dr. Dan Blumberg, Vice-President & Dean, Research & Development, and Prof. Adrian Stern, Head, Dept. of Physics, Ben-Gurion University with the ITCA delegation



Dr. Blumberg Presented Certificates of Award to the Successful Delegates from ITCA SpaceTech Institutional Consortia



ITCA INSTITUTIONAL DELEGATION

Under the Leadership of



Dr. K. Gopalakrishnan

Secretary General, UNISEC India
Secretary General, Indian Technology Congress Association
Dean (R&D), New Horizon College of Engineering



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Assistant Professor, Dept. of ECE
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Mr. Gautham Balasubramanya

Core Member
Indian Technology Congress Association
Bangalore, Karnataka



Dr. G. Jims John Wessley

Head, Dept. of Aerospace Engineering
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Dr. M. Mahadeva

Trustee
Dr. Ambedkar Institute of Technology
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Dr. S. Mohan Kumar

Associate Professor, Dept. of ISE
New Horizon College of Engineering
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Dr. C. Nanjundaswamy

Principal
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Professor & Head (R&D), Dept. of EEE
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Surampalem, Andhra Pradesh



Dr. T.K. Rama Krishna Rao

Principal
Aditya College of Engineering and Technology
Surampalem, Andhra Pradesh



Dr. G.P. Saradhi Varma

Principal
SRKR Engineering College
Bhimavaram, Andhra Pradesh



Dr. A. Shajin Nargunam

Director – Academic Affairs
Noorul Islam Centre for Higher Education
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Dr. Sulakshana Chilukuri

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Dr. M.V. Vijayakumar

Professor & Head, Dept. of IS&E
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Dr. B.N. Umesh

Director, Training & Placements
Dr. Ambedkar Institute of Technology
Bangalore, Karnataka



Prof. Yuvaraju Chinnam

Director, Sponsored Research & Foreign Affairs
Amrita Sai Institute of Science and Technology
Amrita Sai Nagar, Andhra Pradesh

Fourthcoming

10-15 March 2019

SECOND INTERNATIONAL DELEGATION

Indo-Israel Space-Tech Leadership Programme

<https://itca.org.in/satellite.html>



Join ITCA's Consortium...

contact

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75 Student Satellites' Mission 2022

Supporting and Co-Hosting Organizations



Partnering Institutions



Designed By: SpaceTech Team, ITCA