

"Creating a New Young India - Making Space Explorable and Economical for the Future Generation"

- Dr. Srimathy Kesan

Introduction

Dr. Srimathy, the Founder & CEO of a leading Science and Technology incubator-"Space Kidz India" (SKI), is helping children reach out to the stars, quite literally. Launched in 2011, Space Kidz India has designed and pioneered multiple programs that are aimed at creating the next generation of scientific thinkers in India.

Driven with a mission to disrupt the mundanity of the Indian education system, Dr. Srimathy has broken ground in a hitherto uncharted avenue called "Space Education" through her unique programs, aimed at grooming India's future scientists. Her ultimate goal is to lay the foundation for a World renowned Space University with manufacturing port in India.

She is the only Indian to be decorated with the Ambassador status to the top 3 Space centres of the World, NASA, ESA and GCTC - Moscow. Apart from taking children to these research centres for hands on Space training - Rocket building and launching techniques, Satellite making, she has also invited Cosmonaut Salizan Sharipov (Director of Yuri Gagarin Space Centre, Moscow) and Astronaut Marsha Ivins (NASA) to India to meet with Indian students and share their Space travel experience and to motivate students, Retd. Wing Commander Rakesh Sharma – Hero of Soviet Union, Space traveller and the only Indian Cosmonaut had also shared his expertise with these students.

"Creating Young Scientists and Young Leaders for the Country" is her main motto and for which she had designed a metric to hand pick them. "Young Scientist India", "Youth Icon", and "I4 India - Innovate for India" are annual contests, a unique avenue to promote innovations in the field of Science and Technology for high school and University students, apart from hand picking the core team of Young Scientists, they are then mentored, funded to create path breaking live projects.

Building and Launching Satellites by High school and University students was her dream which came true in the year 2015, where her SKI team of Young scientists built and launched the 1st ever "Near Space Launch Vehicle, NSLV a Balloon Satellite named NSLV.KALAM.1 that was flown to stratosphere 1,07,000 ft and created numerous records and especially special mention in the **Limca book of records for being the first student team to launch a high altitude balloon from India and reach an Altitude of 1,07,000ft**. Subsequently, have been successful in launching 9 NSLV's from different parts of India. Highly accoladed for this unique idea several Universities have collaborated with SKI to launch their Satellites.

On July 25th 2018 Team SKI created record by launching it's NSLV 3 and entered into ASIA BOOK OF RECORDS as the "First ever Thermal printing in Near Space" The payload carried a thermal printer which printed the autobiography of former president Dr.A.P.J. Abdul Kalam and the Honourable Chief Minister of Rajasthan Mrs. Vasundhra Raje then.

And later on July 26th 2018 Team SKI Launched it's NSLV 4 and broke it's own record and got mentioned in ASIA BOOK OF RECORDS for reaching an Altitude of 1,22,000ft which is the highest ever altitude reached by an High altitude balloon which was launched from Bikaner, Rajasthan.

On 25th Aug 2018 "SKI - NSLV- 6" - the giant balloon, two times the size of the Empire State building, from NASA's Columbia facility soared the sky with SKI's 500 gm payload designed by its highly talented "Junior team aged between 10 years -15years. This balloon travelled "near space" below the Karman line where outer space begins. This was the children's 1st step towards economically experimenting and pushing their scientific imagination. It was part of SKI's 1st launch as Dr. Srimathy, Ambassador to the CiS program, USA.

Recently Team SKI collaborated with the world's first women's college "Periyar Maniammai Institute of Technology" and created a record on the occasion of the centenary celebrations of their college and got registered in ASIA BOOK OF RECORDS as "All women team to launch a high altitude balloon satellite" on 21st April 2019.

Satellites launched

a) KALAMSAT 1 – WORLD'S SMALLEST AND LIGHTEST SATELLITE:

For the 1st time in the World, team SKI had designed and launched the "World's Lightest Satellite", which was fully 3D printed. The 64 gram "Kalam SAT", measuring 3.8 cm cube (Femto Category), was launched by NASA along with several other experiments on Terrier Orion sounding rocket on 22 June 2017 from the Wallops Island flight facility in Virginia.

b) SKISAT - a 1U CUBESAT with 27 experiments on board:

The SKISAT is a 10 cm cube satellite weighing 800 grams. This was launched on 25th August 2018, 20:30-00:30 Hrs IST on a reusable rocket from Spaceport America. It was the very first time that an Indian satellite went on a reusable rocket. The small satellite carried 27 payloads onboard to study atmospheric data and the functionality of satellites. It has 2 cameras onboard to capture the RGB and IR spectrum, in addition to a 16 MHz dual ATMega644 computer with 64kb flash and speed of 20 million instructions per second.

c) Orbital Satellite - KALAMSAT - V2:

The KALAMSAT V2 was launched on 24th Jan 2019 at 23:37 hrs from ISRO, Sriharikota, Andhra Pradesh, to explore the possibilities of establishing communication during disasters through NANO satellite technology. It was launched in PSLV C44, and was the first ever Indian student satellite to use the PS4 stage as an orbital platform. "KALAMSAT. V2" was placed in the Low earth orbit at ~460 kms.

International collaborations

SKI has collaborated with Moscow Aviation institute, Moscow to build a "Friendship Satellite" commemorating the Diplomatic relationship and Friendship

between both the Countries. This is proposed to be launched from Baikonur, a 1st of its kind collaboration between both the Country students.

Special recognition

- Space Kidz India (SKI) is the only organisation to launch 9 balloon satellites, 2 sub-orbital satellites and 1 orbital satellite. SKI has received wide international attention, and found mentions in the Asia Book of Records, URF Book of Records, India Book of Records, Assist Book of Records, and Official World Record, in addition to recognition from Space Agencies, schools, colleges, universities, and political parties world over.
- Since its inception, SKI, Dr. Srimathy's brainchild, has touched millions of young minds and will continue to impact the future generation in a positive manner. SKI has been appreciated and featured on local and national media numerous times. Articles about CEO Dr. Srimathy accomplishments, along with the young minds that she has groomed, have been published by major newspapers and magazines in India.
- Dr. Srimathy Kesan has been showered with many awards, and has been frequently nominated as a "Pioneer" in the field on "Space Education" and awarded as the "Pride of India". She has also won other awards as a "Social entrepreneur" and "Woman Achiever".
- A Travel and Tourism management student, Dr. Srimathy Kesan was awarded an honorary PhD in "Education through Travel" by Cosmopolitan University, United States. She also had received a special commendation from the United States Economic Department, Washington DC, for designing this unique Scientific educational experience for Indian Children in the United States. She has been appointed by His Excellency the Governor of Tamil Nadu as the Planning Board member of Mother Teresa University, Kodaikanal, the only Women University of Tamil Nadu.
- Within a short span of creating SKI, Dr. Kesan, had the opportunity to meet and interact with more than a million children across the Country in various schools, Colleges and Universities, to deliver motivational speeches. Apart from educational institutions she has been invited to deliver motivational speeches at Corporate house and NGO's.

Special mention among them are

- Indian high Commission London, UK
- Indian High Commission Washington DC, United States
- Canadian Parliament Toronto
- Women Icon Singapore
- Asian Fencing Championship Nila University, Malaysia
- GISEC ioTx Expo Dubai
- World 3D Printing forum Dubai
- International conference on Small Satellites @ DRDO, Hyderabad
- Women's day address to 500 Women Scientists at SHAR, ISRO
- Bank of America, Caterpillar, HCL, Accenture, Hexaware, Mahindra
- MARS SUMMIT 2017, CMACGS

Endeavors in education and social consciousness

- Apart from Space Education, SKI is also devoted to promoting "Education through culture".
- Dr. Srimathy believes that art plays a major role in the assimilation and synthesis of learning. In this regard, SKI created history during the 2012 Olympics by becoming the first cultural unit selected from a prestigious list of 22,000 artists to perform at the

London Olympics. Additionally, SKI has hosted numerous cultural events in India, Canada and USA.

- Dr. Srimathy is also an avid social activist, her education through social awareness theme educates the future generation of India on several social issues that plague the society, and is aimed at strengthening India's roots through critical questioning and engagement.
- SKI produced a short film on Breast Cancer, to create awareness among people from all walks of life. Dr. Srimathy visits several corporate houses and colleges to promote the awareness of breast cancer and urges folks to take the preliminary test every year.

- Also, a music video produced by SKI on "Female Foeticide" received critical acclaim.
- Dr. Srimathy has undertaken several AIDS related awareness programs and fundraisers.
- She actively supports several juvenile homes in the city of Chennai, in a bid to improve their lives. She conducts aero modelling and computer workshops for the children and helps them with supplies, medicines and infrastructure requirements. Through constant counselling and motivational speeches, she works on their mental conditioning and improving their self- esteem.
- Her passion for education has recently enabled her to adopt a school in Chennai that is in dire need of help. Dr. Srimathy, and her team strive hard to make sure proper sanitary conditions are met; she collaborates with various NGOs from around the world to procure day to day needs for the school.

Titles and Awards

- Only Indian to receive the "Regal British Award" at the House of Lords, UK in Trilateral Global Summit 2019 by World Humanitarian Drive.
- Received the Honorary Title "The Name in Science and Education" and recognised as an expert and speaker of the 'Oxford Debate' 'University of the Future'.
- Received the Honorary Title "The Name in Science and Education" by The Socrates Committee United Kingdom.
- Received the "Thanga Tharagai" award by NEWS 7, for "Women in Science and Technology".
- "Best Social Entrepreneur Award 2019" was awarded by FICCI FLO.
- "Enterprising Women Entrepreneur", award by the Ministry of Small, Micro and Medium enterprise (MSME).
- "Working Women Achievers Award" (WWAA) 2019 by OORUNI Foundation.
- Received "Nakshathra Nangai" award by SAIL Foundation.
- Received "Nation's Supreme Pride" award by Panimalar Institutions, Chennai.
- The "Legendary Lioness Lifetime Achievement Award India 2018" VR ONENESS Foundation.

- Most Inspiring Innovative Entrepreneur Award South Indian Startup Awards (SISA).
- "Woman of the Nation Award" International Educational and charitable society, Pondicherry.
- "Women Achiever of the year"- Excellence in the field Science and Technology category Raindrops.
- Women of the year in Science and Technology AMN Global Trust
- Women of the year in Science and Technology category Women Entrepreneur Development Organisation.
- Golden Disk Award from India books of records World Record Union.
- MAYAN Awards by Vista India by Dr.Kiran Bedi.
- Abdul Kalam Award for Science and Technology.
- Women Icon 2017 by BERG and Nanyang Technological University, Singapore.
- Innovative Educationalist 2017 by Pondicherry College.
- Vidya Award 2017 by Shri Venkateshwara Vidyalaya, Chennai.
- Pride of India 2016 awarded by CNBC and 1000 Petals Foundation, Bangalore.
- 7th World Education Award 2016 in the category Innovative in Pedagogical Learning awarded by Elets.
- Role Model of the year 2016.
- Women Achiever of the year 2016.
- Indian Icon 2015 awarded by Times India News and Meher News 27th June 2015.
- Poomagal Award for the best woman entrepreneur of the year by Parijadham Foundation 5th March 2015.
- "Woman Achiever of the Year 2014 2015", extended by National Entrepreneurs Network (NEN) and Saveetha Entrepreneurs Cell (NEST).
- "Leading Women Entrepreneur", was awarded by II Global during the month June 2014.
- "Naari Shakthi" was awarded by Seemapuri Times, in the month February 2014.
- Young Women Achiever by Guild of Women Achievers.
- CHENNAI SUPER MOM by The Hindu 2009.
- Title "Sirandha Penmani" was conferred by Madha Trust and Kavi Oviya.

- Cavinkare Chinnikrishna Innovation Award September 2013.
- Presented papers at multiple International conferences and have won accolades.
- Centre for Media & Public Affairs (CMPA) announces "Space Kidz India" as the Outstanding Institution of the Year (2013) in promoting children's education 9th JAN 2014.

Awards for Social Contributions

- Social Entrepreneur of the Year awarded by the Rotary Club port city March 21st 2015.
- Social Entrepreneur of the Year award by LIONS CLUB in the month of September 2014.
- Social Entrepreneur of the year 2013, awarded by SDCRF and Indian Sustainability Congress, October 2013.

NCC — National Cadet Corps

- Won the "ALL ROUNDER TITLE" for the 3 CONSECUTIVE YEARS during Under graduation.
- Senior Under Officer of Andhra Pradesh.
- Awarded the "ALL ROUND BEST CADET" of Andhra Pradesh.
- Was Chosen for the Prestigious Prime Minister's Rally at Delhi Republic Day.
- Won the Gold Medal at the State and National level for Word of Command Competition.
- Was Awarded the BEST PARATROOPER of Andhra Pradesh.
- Won the Silver Medal at the All India Firing Competition.

Sports

- Represented the State Andhra Pradesh in 10 Basketball Nationals and Inter Universities.
- State level athlete in Javelin, Shot put and Relay.
- Won 3 Mixed Doubles titles for Badminton, Inter Club's 2010/11/12
- All- rounder at school and college, and represented the State of Andhra Pradesh in 10 Basketball Nationals and is also a State Athlete.