



### **IDEX** Innovations for Defence Excellence

# ARAM DEFENCE INNOVATION

#### SAIRAM DEFENCE INNOVATION AND STARTUP ECOSYSTEM

This booklet showcases the remarkable journey of SAIRAM Institutions in fostering innovation and entrepreneurship within the Indian Defence Ecosystem. Explore the vibrant ecosystem, innovative programs, and remarkable achievements that have propelled SAIRAM to the forefront of defence technology development.









#### **PEOPLE + PROCESS + PURPOSE = SUCCESS**

At Sairam, we realize that the higher education sector is under significant pressure to adapt to the changing needs of the future. Institutions need to become more operationally efficient and effective, improve student outcomes, increase access to higher education, recruit and retain top faculty and researchers, and more.

Effective transformation in these areas requires an organization–wide strategic approach that seeks to improve and enhance organizational models, operating processes, technology, leadership, and talent models. We have adopted a 3Ps model of aligning People, Process and Purpose with the vision of the organization.





















SAIRAM Institutions, renowned for their commitment to academic excellence and research, have established themselves as a leading force in shaping the future of the Indian Defence industry. With a legacy spanning decades, SAIRAM has nurtured generations of engineers, scientists, and entrepreneurs who are driving innovation across various domains.





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# UNVEILING OF CONSTITUTION OF INDIA PLAQUE

#### CHIEF GUEST

# Thiru. P.Thamarai Kannan, IPS

Additional Director General of Police, Law & Order, Chennai

#### **GUEST OF HONOUR**

**Mr.Varadarajan** F/o. Major Mukund Varadarajan, Ashok Chakra (P)





#### UNVEILING OF CONSTITUTION OF INDIA













# Sairam Institutions committed to donating Rs.10 lakhs to the National Defence Fund.

On the occasion of the recent audio launch of the Tamil film Amaran, held at Shri.Leo Muthu Indoor Stadium at the Sairam Institutions Campus in Chennai on 18.10.2024, we had the privilege of celebrating the life and sacrifice of Major Mukund Varadarajan, an army officer who laid down his life in service of the nation. This film is a tribute to the unparalleled bravery and sacrifice of Major Mukund Varadarajan, who selflessly laid down his life for the nation. Inspired by his valor and as a tribute to all the brave soldiers who have sacrificed their lives for our country, Sairam Institutions committed to donating Rs.10 lakhs to the National Defence Fund.



# A SALUTE TO OUR NATION'S HEROES !

Sairam Institutions had the privilege of hosting the Audio Launch event of "Amaran", the biopic of Major. Mukund Varadarajan. During the event Sairam had committed to donate Rs. 10 Lakhs to the National Defence Fund. Mr. Sai Prakash LeoMuthu, Chairman & CEO of Sairam Institutions, recently met Shri. Rajnath Singh, Hon'ble Defence Minister of India and presented the cheque of Rs. 10 Lakhs.

A proud moment of solidarity and gratitude for our nation's defenders.







Pradeep Kumar Srivastava, Under Secretary

Tele : 23013683 FAX : 23015655

#### Dated: 18-November-2024

#### D.O. No. 82(62907)/2024-PMF

Dear Sir/Madam,

We acknowledge with thanks the generous contribution made to the National Defence Fund.

The Prime Minister appreciates this thoughtful gesture and conveys his gratitude. This valuable contribution will be of immense help for undertaking various welfare activities for Defence / Central Police personnel and their families.

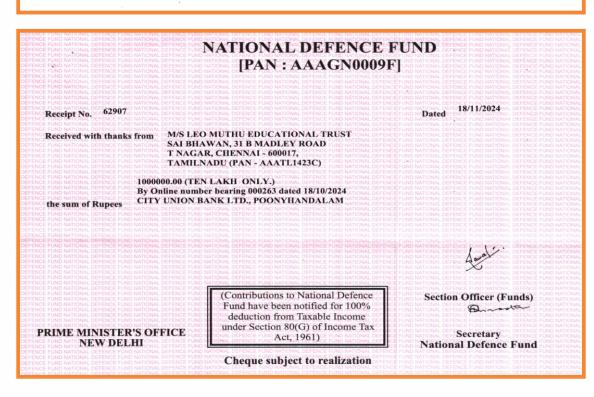
A formal receipt is enclosed.

With Regards,

Yours faithfully,

[Pradeep Kumar Srivastava]

M/S LEO MUTHU EDUCATIONAL TRUST SAI BHAWAN, 31 B MADLEY ROAD T NAGAR, CHENNAI - 600017, TAMILNADU (PAN - AAATL1423C)









The SAIRAM Techno Incubator Foundation is a testament to the institution's dedication to fostering innovation and entrepreneurship. This dedicated foundation provides a nurturing environment for budding entrepreneurs and startups, offering essential resources, mentorship, and guidance to transform ideas into impactful ventures. Palanivel Veeramuthuvel project director of the Chandrayaan-3 mission had Interacted with Sairam Mars Rover students' team and our Startups products.



The IDEX DISC Defence Competition, a prestigious national platform, provides a stage for aspiring innovators to showcase their groundbreaking solutions for the defence sector. Participants compete across various categories, presenting their ideas to a panel of industry experts and investors. The competition has become a catalyst for identifying and nurturing the next generation of defence innovators.

The outcome of the competition resulted in achieving highest number of submissions for DISC challenges from South India region and many teams were shortlisted for High Performance Committee Selection round from the Institution and to name a few:-

- 1. Al based Collision avoidance system for unmanned vehicles- Ministry of Defence
- 2. Autonomous Operation (Starting, Running and Shutting Down) of a Diesel Alternator suitable for charging Lithium Ion Batteries- Indian Navy
- 3. Advanced Truss Bridge-Indian Navy
- 4. Hall Effect Plasma Thrusters for Spacecraft orbit Corrections- Ministry of Defence

Ministry of Education Institution's Innovation Council



in Association with Industry Institute Partnership Cell-AICTE (IIPC)



Sairam Defence Industry Connect 1.0 was organized on 22nd November 2022. Dr. T. K. VARADARAJAN, Director, Directorate General of Quality Assurance (DGQA) Ministry of Defence was the Chief Guest.



#### Armor Grandeur Pvt Ltd. Wins Defence India Startup Challenge

Armor Grandeur Private Limited, a startup based in Sairam Institution, has secured victory in the Defence India Startup Challenge (DISC-10), organized by iDEX, Defence Innovation Organisation, Ministry of Defence. This achievement marks a significant step forward for the company in its pursuit of developing advanced technologies for the Indian Defence sector.

#### DISC 7.0 SPRINT-INDIAN NAVY

The team was felicitated by Honorable Raksha Mantri

#### Shri. RAJNATH SINGH

in the Innovations for Defence Excellence (iDEX) Pavilion for showcasing the prowess of **Sairam Institutions** R&D and innovation in futuristic Defence Technologies during the **'DefExpo 2022'** held at Gandhinagar, Gujarat on 19th October 2022.



## **WINNERS**



Dr. K. PORKUMARAN, Principal, Dr. A. SANJEEVI GANDHI, Asso. Professor/EEE Mr. C. JEEVA, Assistant Professor/EEE with EEE Department students KRITHIKA B / ABISHEK J / SHREYA R / LAVANYA S / SWETHA S created history by winning the most coveted DISC 7.0 SPRINT Challenge.

#### **Focus on Defence Innovation**

Armor Grandeur Pvt Ltd. has been recognized for its innovative approach to defence technology by winning the DISC-10 competition. This win showcases the company's commitment to developing cutting-edge solutions that meet the specific needs of the Indian Armed Forces.



- The company has successfully designed and developed a Convertor Unit, Gyro Unit, and Voltage & Frequency Regulating Unit, demonstrating its expertise in power electronics and control systems.
- Armor Grandeur Pvt Ltd. also secured a win in the Indian Navy DISC 7 SPRINT challenge, further emphasizing its capabilities in developing advanced technological solutions.

#### **A Commitment to Growth and Innovation**

Armor Grandeur Pvt Ltd. is a young company founded in 2022 with a mission to deliver innovative solutions for the Electric Vehicle and Battery Management System (BMS) sectors.

This achievement will be a catalyst for the company's growth and expansion as it further strengthens its position as a leading player in the defense technology sector.



# Armor Grandgur pvt Itd

# Armor Grandeur : A Proud Recognition

Armour Grandeur Pvt. Ltd. have been honoured by the Indian Navy Chief Admiral R Hari kumar at the SWAVLAMBAN 2023 event.



#### Sairam Institutions' Innovation at DefExpo 2022



The DISC 7 SPRINT team was felicitated by Raksha Mantri Shri. Rajnath Singh at the iDEX Pavilion for showcasing Sairam Institutions' R&D in futuristic defence technologies.

The event, held on 19th October 2022 at Gandhinagar, Gujarat, was inaugurated by Prime Minister Shri. Narendra Modi ji, who congratulated the team on their achievement.

#### Winning Grants of 2.75 CRORES

In a testament to its commitment to fostering innovation, SAIRAM Institutions has secured a prestigious grant of 2.75 crores of the two editions of the IDEX DISC Defence Competition. This significant funding empowers SAIRAM to further support the growth and development of the defence ecosystem, providing crucial resources to promising start-ups and innovators.

#### **Recognition of Excellence**

The grants represent a significant achievement for SAIRAM Institutions, highlighting its commitment to excellence and innovation.



#### **Boosting Innovation**

The funding will be used to support start-ups, provide mentorship, and foster the development of cutting-edge technologies.

#### **Accelerated Growth**

The grants will accelerate the growth and impact of the SAIRAM Defence Innovation and Startup Ecosystem.

#### FOSTERING INNOVATION AND ENTREPRENEURSHIP

SAIRAM Institutions are actively fostering innovation and entrepreneurship within the defence ecosystem. They offer a variety of programs and initiatives designed to cultivate the next generation of defence innovators. These programs provide opportunities for mentorship, training, and networking, creating a supportive environment for start-ups to thrive.

#### **Idea Generation**

SAIRAM hosts workshops and hackathons to encourage the development of innovative ideas and solutions for the defence sector.

#### **Incubation Support**

The SAIRAM Techno Incubator Foundation provides startups with access to infrastructure, mentorship, and funding to help them bring their ideas to life

#### **Industry Collaboration**

SAIRAM collaborates with leading defence companies and research institutions to create opportunities for start-ups to gain real-world experience and connect with industry leaders.





#### EMPOWERING THE DEFENCE ECOSYSTEM



SAIRAM Institutions are transforming India's defence landscape by driving innovation, entrepreneurship, and collaboration. Their efforts are strengthening self-reliance in defence technology and building a resilient sector.

- Technology Transfer: Cutting-edge innovations from SAIRAM's labs are transferred to the defence industry, enhancing innovation and self-sufficiency.
- Skill Development: SAIRAM offers specialized programs to equip individuals with the skills needed for success in the defence sector.

#### **Looking Ahead**

SAIRAM is committed to expanding its programs, forming new partnerships, and nurturing future defence innovators, further reinforcing India's self-reliant defence ecosystem. MoEs Institution Innovation Council (IIC) AICTE-Industry Institute Partnership Cell (IIPC)





**Ministry of Defence Innovations for Defence Excellence (iDEX) Innovate 4 Defence-Internship** 

# Students for having got **INTERNSHIP OFFER** in the Prestigious

**INNOVATIONS FOR DEFENCE EXCELLENCE (IDEX) INNOVATE4DEFENCE - INTERNSHIP 2023** 



**GEET MALIKA R** II Year / CIVIL



**SAKTHISREE K** II Year / AI & DS



ADARSH V III Year / AI & DS



**SUDHARSAN S C** 

III Year / AI & DS

**KRITHIKRAGHAV V** 

II Year / AI & DS



**RAMAKRISHNAN S** II Year / ECE





**BRAMARAMBIKA P** II Year / AI & DS



III Year / ECE

HARINI V

II Year / AI & DS



**FRANKLIN CHARLES S** II Year / ECE



**NIVEDHITHA M** II Year / EEE



**SOUMYA M** III Year / EEE



**NAWIN VISWAJITH B** Il Year / Al & DS





**KAMALESHWAR V,** II Year / AI & DS





# Imagine the Future and Make it happen!





Together let's build a better world where there is NO POVERTY and ZERO HUNGER. We have GOOD HEALTH AND WELL BEING QUALITY EDUCATION and full GENDER EQUALITY everywhere. There is CLEAN WATER AND SANITATION for everyone. AFFORDABLE AND CLEAN ENERGY which will help to create DECENT WORK AND ECONOMIC GROWTH. Our prosperity shall be fuelled by investments in INDUSTRY, INNOVATION AND INFRASTRUCTURE that will help us to REDUCE INEQUALITIES by all means. We will live in SUSTAINABLE CITIES AND COMMUNITIES. RESPONSIBLE CONSUMPTION AND PRODUCTION will help in healing our planet. CLIMATE ACTION will reduce global warming and we will have abundant, flourishing LIFE BELOW WATER, rich and diverse LIFE ON LAND.

We will enjoy PEACE AND JUSTICE through STRONG INSTITUTIONS and will build long term PARTNERSHIPS FOR THE GOALS.



For the goals to be reached, everyone needs to do their part: governments, the private sector, civil society and **People like you.** 

Together we can...

Drakash Jeo Muthu

Chairman & CEO – Sairam Institutions



incubation@sairam.edu.in





Dr. K. Palanikumar Dr. K. Porkumaran Principal/SIT Principal/SEC Chairman & CEO

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Together we can...