



# STEM CONNECT

Newsletter 2025



## About FSID

The origins of FSID go back to 1991 when SID (Society for Innovation and Development) was set up in close collaboration with IISc within its sylvan historic campus. At inception, its mission was to use the incredible repository of knowledge, world class infrastructure and talent present within IISc to help business enterprises and thereby the economy and the nation at large. The Foundation for Science Innovation and Development (FSID) was incorporated on 8th August 2020 as a Section 8 Company under Companies Act 2013. FSID is promoted by Indian Institute of Science and was incorporated to further this original mission. It has now grown to become single window access for all stakeholders to the deep science and deep tech knowledge within IISc. It provides a 360-degree set of offerings that facilitates the delivery of its objectives.

## Foreword from the Director

As I reflect on 2025, I can confidently say it was a promising year for our STEM Cell and a year of meaningful achievement for our incubated startups. We strengthened our incubation footprint, crossing the milestone of 140 deep science and technology startups, each rooted in rigorous research and core science and driven by a commitment to solving complex, real-world challenges.

We also witnessed stronger engagement from corporate partners, whose support extended beyond traditional funding to include patient capital, domain mentorship, infrastructure access, and long-term collaboration. This growing corporate interest signals increasing confidence in science-driven innovation as a foundation for national capability building and sustainable value creation.

It was encouraging to see the growing participation of young entrepreneurs, including an increasing number of women-led ventures, who are choosing to build in deep science and deep technology domains that demand resilience, long-term thinking, and conviction. Together, this convergence of committed founders and patient corporate capital reflects a maturing startup ecosystem that understands the need for long-term investment in science to support India's priorities in sovereignty, industrial resilience, healthcare, and sustainable growth.

We look forward to strengthening our incubation ecosystem and expanding our startup portfolio while deepening our ability to offer robust mentorship, access to advanced infrastructure, and systematic technical and market validation support to our incubated startups.

**Prof B Gurumoorthy**  
Director- FSID

# About STEM CELL

deep science startups FSID | IISc

(Science, Technology, Entrepreneurship & Money)



STEM Cell at FSID is a dedicated deep-science incubator supporting research-driven startups with high societal impact. Anchored at IISc, it provides access to world-class research, infrastructure, and scientific expertise to help startups navigate long R&D cycles, technology validation, regulatory pathways, and commercialization. Through structured incubation, STEM Cell bridges cutting-edge research and real-world deployment across sectors such as healthcare, energy, space, materials, and biotechnology.

# Leaders who make it possible

---



## **Prof Balan Gurumoorthy**

Prof. B. Gurumoorthy serves as the Director of the Foundation for Science, Innovation and Development (FSID), established at the Indian Institute of Science (IISc), and is a senior faculty member at IISc. Associated with FSID for over a decade, he has been a driving force in shaping the organisation's deep science innovation ecosystem. He provides strategic leadership across FSID's various divisions – CORE Labs, STEM Cell, SEED,

TIME<sup>2</sup>, and Strategic Programs – enabling collaboration between academia, industry, and startups to advance science-led innovation.

## **CS Murali**

CS Murali is the Chairman of STEM Cell, FSID at the Indian Institute of Science (IISc). He was earlier the Chief of Corporate Affairs at Cognizant Technology Solutions; Operating Partner at Connect Capital Ventures; Chief Operating Officer at HP Globalsoft; and President and CEO of LEC (India) Software Centre.





### **Raj Waghray**

Mr. Raj Waghray is the Chief Executive of STEM Cell, the deep science and technology incubation arm of the Foundation for Science, Innovation and Development (FSID) at the Indian Institute of Science (IISc), Bengaluru. At FSID, Mr. Waghray leads one of India's foremost deep-science incubation initiatives, supporting over 100 startups with a combined valuation exceeding \$600 million.

He plays a key role in selecting high-potential ventures, guiding their technology-to-market journey, and connecting them with investors, corporates, and government programs. He has also mobilized significant government and CSR funding to strengthen the incubation ecosystem.

### **Dr. CV Natraj**

Dr. CV Natraj is our Chief Scientific Advisor, and an independent director on the boards of Rallis and Tata Chemicals. He was earlier SVP at Unilever, and conducted research at University of Michigan, Cardiff University, and University of Wales, Cardiff. He is a graduate of Indian Institute of Science.



### **Air Cmde PK Choudhary, VSM (Retd)**

Air Cmde PK Choudhary, VSM (Retd) currently serves as Advisor – Defence & Aerospace at FSID, IISc, and is the Founder of a Bengaluru-based UAV startup. He brings over three decades of leadership experience in combat aircraft operations, engineering maintenance, and MRO within the Indian Air Force, with expertise across Russian and Western aircraft platforms. Trained internationally on Depot Level Maintenance (DLM) of the M53-P2

(Mirage) engine, he has commanded major Base Repair Depots and Air Force stations managing large technical workforces and multi-fleet supply chains.

# Building India's Startup Ecosystem:

## Advancing Science-Led Innovation for Societal Impact through FSID's Multidisciplinary Startups (2025)

---

In 2025, FSID's incubation cell witnessed a growing momentum towards science-led, domain-anchored entrepreneurship, reflecting a broader shift in India's innovation landscape. A growing number of young entrepreneurs including an increasing representation of women founders stepped forward to build ventures grounded in rigorous scientific research and long-term technological development.

FSID's incubation efforts remained focused on building science-driven ventures of national importance across Defence-Tech, Sustainability and CleanTech, HealthTech, and SpaceTech. Startups in these domains addressed some of India's most critical

priorities strengthening national security, advancing sustainable development, improving healthcare access and outcomes, and enabling indigenous space capabilities.

The rising interest in deep science and deep technology entrepreneurship this year signals a maturing startup ecosystem, one that prioritises long-term value creation over short-term scale. Through access to IISc's research strength, domain mentorship, and patient incubation support, FSID continued to enable founders to translate scientific research into technologies with meaningful societal and strategic impact.



# Our Incubated Startups – 2025

# Healthcare & Medtech

## MedrinZ Bio

MedrinZ Bio is a pioneering deep-medtech startup co-founded by Professor Kaushik Chatterjee and Dr. Indranil Chakraborty, two scientists from the Indian Institute of Science (IISc), Bengaluru, India. MedrinZ makes cutting edge orthopaedic implants that are innovative and cost-effective enhancing the quality of life for patients worldwide.



## Ferry Lifesciences

Ferry Lifesciences was founded by Dr. Surya Vardhan to make essential blood tests affordable and accessible. Starting with a lab-free microfluidic cartridge that delivers iron, hemoglobin, and ferritin tests for under \$3, Ferry has grown into a platform rethinking how diagnostics are built, scaled, and integrated with patient data.



## Quixotix Bioprinting Pvt. Ltd.

Quixotix Bioprinting Pvt. Ltd., founded by SaiPradhan, specializes in the research, development, and custom implementation of bioprinting technologies. They aim to develop practical and effective bioprinting solutions for healthcare and biomedical research in Tissue engineering and Regenerative Medicine.



## En Life Research Pvt. Ltd.

En Life Research Pvt. Ltd., founded by Prof Deepak Nair, enLife aims to develop innovative, accessible, and accurate diagnostic tools for the early detection of neurodegenerative diseases, empowering healthcare providers and patients with actionable insights for better outcomes.



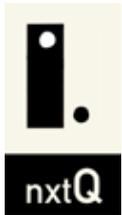
# Healthcare & Medtech

---

## nxtQ

---

nxtQ is a health-tech company developing affordable 3D movement analysis for sports and clinical use. Using wearable sensors and intelligent, anatomy-specific algorithms, nxtQ delivers accurate, actionable insights for physiotherapy, orthopaedics, rehabilitation, and biomechanics professionals.



## Prana Xenotransplant

---

Prana Xenotransplant (Prana XT), founded by Dr. Pravin Kini, is addressing India's organ shortage through gene-edited porcine organ transplants. By combining gene editing, cloning, and advanced surgical technologies, Prana XT aims to deliver safe, scalable alternatives to human donor organs—translating global breakthroughs into clinical solutions for India.



## Aagamiseq Technologies Pvt. Ltd.

---

Aagamiseq Technologies Pvt. Ltd. is a pioneering biotech startup developing advanced automated systems for single-cell and single-molecule analysis. Founded by Prof. Manoj Verma, the company leverages solid-state micropore and nanopore technologies to enable early disease diagnosis and advance precision medicine.



# Sustainability & Cleantech

---

## Eco Saathi Green India Pvt. Ltd.

---

Eco Saathi Green India Pvt. Ltd., founded by Ajit Pallai, is a sustainability-focused company creating eco-friendly products from bamboo, neem wood, and crop residue. Working with local artisans across India, Eco Saathi supports livelihoods while preserving traditional crafts. Its range spans personal care, home décor, hospitality products, and corporate gifting—advancing a zero-waste, eco-friendly ecosystem.



## SustivonAI

---

SustivonAI, founded by Harsh Marigowda and Dr. Archana, is a cross-sector sustainability platform connecting businesses with verified green fuel suppliers, GHG consultants, and compliance tools. It enables industries across maritime, aviation, construction, and manufacturing to meet net-zero and regulatory requirements under FuelEU, ReFuelEU, IMO, ISCC, RED II/III, and other global frameworks.



## Ecostrata

---

Ecostrata, founded by Vijay Yashwanth and Nitin N, is developing low carbon solutions for the construction sector. Its flagship technology, Novacret, is a clinker free concrete designed to cut the carbon footprint, conserve curing water, and reach target strength within three days.



## Macof Innovation (CPDMED)

---

Macof Innovation (CPDMED), founded by Dr. Amita Rani, develops portable biosensing solutions for food safety and rapid contamination detection. Combining molecular diagnostics, optical sensing, and continuous R&D, Macof enables reliable, accessible food quality monitoring for households, industries, and individuals—anytime, anywhere.

# Sustainability & Cleantech

---

## Abigh Art

---

Abigh Art, founded by Gopal and Hunny Bidlan, enables scalable, sustainable production of personalized parametric 3D construction and interior art using a modular, robotic manufacturing system and AI-powered design platform. It helps architects, developers, and designers create custom walls, facades, and installations faster, at lower cost, and with reduced energy—solving mass customization without compromising quality.



## Mankomb

---

Mankomb is a deeptech startup revolutionizing home appliances through AI vision and advanced deep-technology solutions. Founded by Mrudul and Dinesh, the company develops smart, sustainable appliances that improve efficiency, convenience, and environmental performance—setting new standards for modern living.



---

## WATTMOTIVE EV Technologies Pvt. Ltd.

---

Wattmotive EV Technologies Pvt. Ltd., founded by Bikram Saha, is building India's next-generation electric vehicle charging ecosystem. Rooted in power electronics, semiconductor innovation, and connected mobility, the Wattmotive team brings deep expertise in designing high-efficiency, high-density power converters and developing scalable, future-ready EV charging platforms.



# Defence Tech

---

## IndyAstra Technologies

---

IndyAstra Technologies, founded by D. Padmanabhan (Paddy), is an AI-first defence technology company delivering advanced AI solutions to the Indian defence forces. A spin-off from IndyGen AI Labs, the company specializes in emerging technology R&D and custom, integrated solutions that combine artificial intelligence with sensor-based systems.



## Thinking balloon

---

Thinking Balloon, founded by Rushav and Saurabh Chalke, builds road-mobile tethered aerostat systems that provide persistent aerial intelligence. Designed as rapidly deployable “towers in the sky,” their platforms deliver weeks-long surveillance and connectivity for defence, homeland security, and disaster response—using agile, low-logistics designs with modern materials and fiber-optic links.

---

## EtherX AI

---

EtherX AI, founded by Prof. Chandrasekhar S and Prof. Chetan Singh Thakur, is an IISc-FSID-incubated deep-tech venture building AI solutions for healthcare and space. Its SUSHRUT handheld ultrasound enables real-time edge AI diagnostics, while its neuromorphic sensing and chip designs support space situational awareness—delivering low-power, cost-effective intelligence at the edge.

**EIRs: We supported 6 EIRs in areas ranging from Bio, SpaceTech, Health Tech, Longevity and Nano/Semiconductor areas**

# iDEX Portfolio:

## A focus on Building Defence Capability

FSID's iDEX Project portfolio cluster is not a single product line, it is a systems-level engine that welds together electronics, communications, sensing, autonomy, space and compute into field/theatre-ready capability.

As iDEX Partner Incubator, FSID is today incubating 14 startups across 25 iDEX projects (~Rs 215 crore) but the real story is not the count. It is the cultural and infrastructural transformation that converts academic excellence into national advantage - where curiosity meets discipline.

FSID as Partner Incubator supplies the pressure and the polish. Here, hypotheses are not celebrated until they survive the heat of engineering. Prototypes are stress-tested, failure is logged and learned from, and iteration

is relentless. That culture of "never settle for good when great is possible", is the secret ingredient. FSID channels that ethos into startups that do more than demo. They deliver components and subsystems India can own, repair, and upgrade on its own timeline.

- **AerX Pvt Ltd**
- **Akashlabdhi Pvt Ltd**
- **Astrome Technologies**
- **Agnit Semiconductors**
- **Bellatrix Aerospace**
- **Digantara Research & Tech**
- **Falcon Victor Pvt Ltd**
- **Next Defence Pvt Ltd**
- **Prayasta 3D Innovations Pvt Ltd**
- **SpaceFields Pvt Ltd**
- **TIEA Connectors**
- **Tonbo Imaging Pvt Ltd**
- **Tsalla Aerospace Technologies**

# Our CSR partners

---



# Events and trainings 2025



Bengaluru Tech Summit 2025



BRICS Youth council



Cyber security MOU signing



National Startup Day



Innovators Connect - Tandem



ELCIA Tech Summit 2025



CSRbox 2025



Che-mystery workshop



Incubation Centre Visit by PESITM College, Shivamogga