



TECHIN
IIT PALAKKAD

A Synergetic Catalyst to Innovate

ANNUAL REPORT 2024-25



TECHIN









IIT PALAKKAD

A Synergetic Catalyst to Innovate

ANNUAL REPORT

2024-25



	1	LEADERSHIP MESSAGES	1
	2	OUR COLLABORATORS	3
	3	BACKGROUND	4
	3.1	About IIT Palakkad	4
	3.2	About TECHIN	5
	3.3	Startup Success Stories	10
	4	GLOBAL SANITATION CENTER OF EXCELLENCE (GSCOE)	13
	5	ESTABLISHMENT OF NEW TECHNOLOGY VERTICAL	14
	6	OUR STARTUPS	15
	7	INCUBATION PROGRAMS	17
	7.1	Samavesh 1.0	17
	7.2	Samastha 6.0	17
	7.3	Arogyam 3.0	18
	8	STARTUPS INCUBATED AT TECHIN: 2024-25	19
	8.1	Femicura Healthtech Private Limited	19
	8.2	Pritvichakr Innovations Private Limited	20
	8.3	Bactreat Environmental Solutions Private Limited	21
	8.4	Biovidhan	22
	8.5	Dhanvantri Biomedical Private Limited	23
	8.6	Cosmovend Automations Private Limited	24
	8.7	Rehumus Technology Private Limited	25
	8.8	Cluix Private Limited	26
	8.9	Aqualys Water Technologies Private Limited	27
	8.10	Sundarban Chemicals Private Limited	28



STENTINCON

8.11 Viomax Enviro Solution Private Limited	29
8.12 Vertox Labs Private Limited	30
8.13 Aarvi Energy Filtrex And Environmental Solutions Private Limited	31
8.14 Revin Techno Solutions Private Limited	32
8.15 Dromolys Research And Development Private Limited	33
8.16 Bumblebee Instruments Private Limited	34



WORKSHOPS, TRAINING AND SKILL DEVELOPMENT 35

9.1 Innovate Kerala - DPIIT - KSUM ID Drive For Startups	35
9.2 Session on the Importance of Intellectual Property	36
9.3 Certified Plumbing Technician	37
9.4 Sessions on Entrepreneurship & Incubation for Students	38
9.5 Entrepreneurship Development Programme for Startups - IIM Kozhikode	39
9.6 TECHINSPIRE Series	41



SAMAVESH – WOMEN ENTREPRENEURSHIP PROGRAM: STARTUP ONBOARDING EVENT 43



TECHIN STARTUP CONCLAVE – SAMAGRA 2025 46



PROGRAMS & INITIATIVES 50



12.1 IIT Palakkad Tech Connect	50
12.2 MSME Tech Connect	51
12.3 12 th KMTC Stakeholders Connect Meet	53



ENGAGEMENTS & OUTREACH 55

13.1 Visit By ISLE Utilities Expert Panel	55
13.2 Visit To IIT Madras	56
13.3 Startup 360, by Leap Kerala Startup Mission	56
13.4 Inter Foundry Meet	57
13.5 Showcasing Innovation at IAC 6.0	58
13.6 TECHIN and GSCOE at Africa-Asia NSS Workshop	59
13.7 Driving Sustainability: TECHIN at the 11 th India CSR & ESG Summit 2024	60

13.8. Techin's Leadership At Huddle Global 2024	60
13.9. TECHIN Startups Showcased at IPTIF Impact Demo Day	61
13.10 Participation in DISHA Higher Studies Expo	61
13.11. TECHIN at Rural India Business Conclave 2024 (RIBC 3.0)	62
13.12. TECHIN at Pan IIT World Of Technology 2025 (PIWOT 2025)	62
13.13 Showcased at Petrichor 25 - IIT Palakkad	63
13.14 Participation at Inclusive Entrepreneurship summit	64
13.15 TECHIN At Horti Expo	64
13.16 Inauguration of New Office - TCON Uniflow Private Limited	65
13.17 Strengthening Medtech Innovation Through Collaboration with IMA Kerala	66
13.18 TECHIN at IINVENTIV 2025 IIT Madras	67
13.19 Empowering Innovation at Dekathon 3.0	68

 14	FIELD VISITS TO INCUBATED STARTUPS	69
 15	ENABLING INNOVATION THROUGH CSR	72
 16	MEDIA	73
 17	GALLERY	76



1

LEADERSHIP MESSAGES



CHAIRMAN'S MESSAGE

Pleased to present Technology Innovation Foundation of IIT Palakkad (TECHIN)'s annual updates for FY 24-25 in this Annual Report.

TECHIN, a Section 8 (not-for-profit) company, was established as the incubator arm of IIT Palakkad, fostering strong collaborations between industry & academia. It supports entrepreneurial initiatives & startups across critical national priority sectors such as water, sanitation, hygiene, medical technology, food technology, & other emerging technologies. TECHIN's portfolio has grown to 33 incubated startups as on March 2025, reflecting steady expansion and the growing impact of our innovation ecosystem; we also witnessed growth in home-grown startup numbers founded by IIT Palakkad fraternity. The past year has been a significant period for TECHIN, marked by key milestones & impactful initiatives. Some of our early startups have expanded their operations through deployment at scale for various clientele while many of the recent startups have progressed from initial traction to generating sales revenues, FY 24-25 total combined startup revenues stood at ₹25 Crores. TECHIN has also generated wider reach and program visibility through focussed outreach efforts yielding higher numbers and better-quality startup applicants from around the country.

TECHIN has setup a dedicated foodtech incubation vertical under which the first project commenced during last quarter. Incubation pitch programs Samavesh 1.0, Samastha 6.0, & Arogyam 3.0 got successfully completed, enabling the onboarding of promising & technologically advanced startups. Events including the Samagra Startup Conclave, Samavesh startup onboarding workshop at IIT Alumni Centre Bangalore, & multiple Tech Connect events with industries & MSMEs further enriched the ecosystem.

TECHIN also continued its efforts in skill development through focused training programmes. Certified Plumbing Technician Programme provided technical training to over 150 individuals across nine batches, enhancing their skills & improving job readiness. A key highlight was the two-week intensive Entrepreneurship Development Program for startup founders and entrepreneurs in collaboration with IIM Kozhikode.

These achievements are the result of TECHIN team's dedication combined with invaluable support from the Board of Directors, funding partners, collaborators, well-wishers, & ecosystem enablers. I extend my sincere appreciation to each of them for their continued support & encouragement.

Looking ahead, TECHIN remains committed to nurturing innovation, fostering entrepreneurship, & driving socioeconomic impact through technology-driven solutions.

Prof. A. Seshadri Sekhar

Director, IIT Palakkad & Chairman, TECHIN



COO'S MESSAGE

At TECHIN, our mission is to empower entrepreneurs to build technology-driven solutions that address real-world challenges and contribute to a more inclusive and sustainable future. We believe that with the right support and intent, innovation can lead to meaningful and lasting impact.

The year 2024–25 has been a significant one for TECHIN, marked by important milestones and steady progress. Several of our startups have scaled their operations and deployed their solutions across diverse sectors. Many newer startups have progressed from initial traction to generating revenue, reflecting the strength and maturity of our growing ecosystem. We also hosted key events such as the Startup Conclave, onboarding workshops, and multiple Industry Tech Connect sessions. These initiatives strengthened industry connections, enhanced startup visibility, and fostered valuable collaborations.

Our approach is rooted in deep, hands-on engagement. We provide comprehensive support

including grant facilitation, structured mentoring, entrepreneurship development programs, field validation assistance, and platforms to connect startups with investors and stakeholders. This integrated support system helps founders overcome early challenges and accelerate their growth.

Our journey has been made possible by the continued support of IIT Palakkad, whose academic excellence and research ecosystem play a key role in shaping our innovation efforts. We are also grateful to our Board of Directors, mentors, funding agencies, industry partners, and academic collaborators for their ongoing guidance and trust. As we move forward, TECHIN remains committed to fostering innovation, supporting entrepreneurship, and contributing to the vision of a technology-driven and self-reliant Bharat.

Mr. Midhu Unnithan
Chief Operating Officer
TECHIN, IIT Palakkad





2

OUR COLLABORATORS

FUNDING PARTNERS



Gates Foundation



COLLABORATORS





3.1 ABOUT IIT PALAKKAD IIT PALAKKAD

Established in 2015, the Indian Institute of Technology, Palakkad is dedicated to creating an environment that enables students and faculty to engage in the pursuit of knowledge, to dream, think, and innovate thereby becoming change agents for a better world. Having begun with just 120 students in July 2015, IIT Palakkad has since grown into an establishment that is about a thousand students strong and with the best manpower in key positions. The Institute recognises collective growth, in collaboration with industry and other academic institutions, as the need of the time and emphasizes blue-sky research and directed research as two essential pillars of technology development. The Institute embraces a vision to be a leader in cross-disciplinary inquiries, and to contribute to the potential that India's demographic dividend represents for the country and the world, which is embodied in the motto of the institute "Nurturing minds for a better world". Located in the historic and vibrant region of Palakkad, known as the granary of Kerala, the institute is perfectly situated as the gateway to the state from the North, Palakkad Gap in the Western Ghats. Surrounded by rich traditions, significant historical events, and its sylvan surroundings, especially the Silent Valley rain forests and ubiquitous palmyra trees, Palakkad provides an inspiring backdrop for academic pursuits.

Sahyadri Campus consists of a series of facilities that facilitate academic, administration, and research activities. The academic block named 'Saraswati' in the Sahyadri campus features a classroom Complex with a capacity of around 2000 students, a Central Fabrication Facility, a Heavy Machinery Lab, a Research Complex, and a large Infrastructure Testing lab. It is also equipped with advanced studio classrooms that facilitate multi-camera recording, lightboard recording, chroma-keying, live-streaming, and web-based video conferencing and editing; and a digitalized Central Library with about 7000 printed in addition to a large number of digital resources, are already accessible to the teaching and student fraternity.

It also encompasses an administrative block, the APJ Abdul Kalam Block, the C06 Classroom cum Laboratory Complex, and the Sangraha block featuring four precast buildings. Additionally, the campus houses cutting-edge laboratories and centres like Smart AgriTech centre for Advanced Research and Development, GSCOE (Global Sanitation Center of Excellence) lab, Environmental Engineering lab, and CIF (Central Instrumentation Facility) lab.

3.2 ABOUT TECHIN

Technology Innovation Foundation of IIT Palakkad (TECHIN), a section 8 not for profit company, is the Technology Business Incubator (TBI) of IIT Palakkad. TECHIN is dedicated to nurturing early-stage startups and aspiring entrepreneurs, guiding them on their journey to becoming successful and sustainable businesses. The mission is to provide comprehensive support to innovators, including financial assistance, expert mentorship, skill development, business support services, and

access to state-of-the-art R&D facilities. Through these resources, we aim to foster innovation and entrepreneurship, helping startups navigate the challenges of the business world and achieve their full potential. At TECHIN, we are committed to creating a thriving ecosystem where innovative ideas can flourish and transform into impactful ventures. Presently, we are incubating around 35 startups dedicated to working on pioneering technologies.

SERVICES & SUPPORT



TECHNOLOGY VERTICALS



SaniTech

SaniTech incubates technological solutions and businesses in the domain of Water, Sanitation, and Hygiene (WaSH). In addition to incubation, the center supports the scaling of existing sanitation technologies, skill development, and training for maintenance and service personnel. It is supported by CSR funding from HDFC Bank Parivartan and the Gates Foundation.



MedTech

MedTech supports startups specializing in medical devices, telemedicine, drug delivery systems, injectables, and diagnostics, providing resources for development and scaling. In collaboration with West Pharmaceutical Services, the center offers access to advanced facilities, industry expertise, and mentorship, ensuring startups receive the necessary guidance to bring innovative healthcare solutions to market.



FoodTech

FoodTech aims to promote innovative startups that address challenges in food production, processing, and sustainability. The initiative offers funding, mentorship, and infrastructure to foster food security, environmental sustainability, and technology-driven growth in the food industry. It is supported by CSR funding from Symega Food Ingredients Ltd.



Technology Innovation Center (TIC)

Technology Innovation Center (TIC) offers comprehensive business and technology mentoring support for startups across various emerging technologies. Catering to both early-stage and advanced-stage startups, TIC provides tailored guidance to help entrepreneurs refine their business models, develop technological solutions, and scale their operations.



GOVERNANCE

BOARD OF DIRECTORS



Prof. A. Seshadri Sekhar
Director, IIT Palakkad
Chairman, TECHIN



Prof. Santhakumar Mohan
Dean, ICSR, IIT Palakkad



Prof. Ganesh Natarajan
Professor, IIT Palakkad



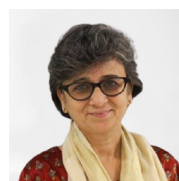
Dr. Arvind Ajoy
Associate Dean, ICSR
IIT Palakkad



Prof. Prabhu Rajagopal
Professor, IIT Madras



Dr. Rajan Srikanth
Founder, SmartKapital



Ms. Poyini Bhatt
Founder-member &
Former CEO- SINE IIT Bombay

FINANCIAL AND TECHNICAL COMMITTEE



Prof. Santhakumar Mohan
Dean, ICSR, IIT Palakkad



Prof. Ganesh Natarajan
Professor, IIT Palakkad



Dr. Rajan Srikanth
Founder, SmartKapital



Prof. Prabhu Rajagopal
Professor, IIT Madras



Dr. Vivek Chaturvedi
Associate Professor
IIT Palakkad



Dr. Anoop Akkoorath Mana
Asst. Professor, IIT Palakkad



Dr. Revathy Padmanabhan
Associate Professor
IIT Palakkad



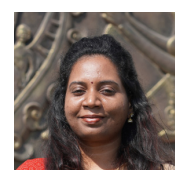
Dr. Dinesh Jagadeesan
Associate Professor
IIT Palakkad



Dr. Pramod Kuntikana
Asst. Professor
IIT Palakkad



Dr. M Sabarimalai Manikandan
Associate Professor
IIT Palakkad



Dr. Praveena Gangadharan
Associate Professor
IIT Palakkad



Dr. Sandeep Chandran
Associate Professor
IIT Palakkad

TECHIN TEAM



Mr. Midhu Unnithan
Chief Operating Officer



Dr. Sarosh Kothandath
Project Manager



Ms. Ramya R
Senior Executive
(Accounts)



Mr. Ranjith E R
Executive (Accounts)



Ms. Jiji M G
Program Coordinator



Mr. Praveen Kumar A
Program Coordinator



Mr. Ajish S
Admin Officer



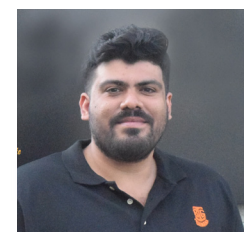
Mr. Jude Arul Kumar
Training Officer



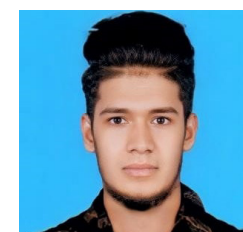
Mr. Deepak U P
Training Officer



Ms. Smruthi S
Training Officer



Mr. Kiran Kumar M
Training Officer



Mr. Binoy N
Attender

TECHIN AT A GLANCE:

Driving Innovation and Impact

Technology Innovation Foundation of IIT Palakkad (TECHIN) continued to foster innovation by empowering startups to build scalable solutions for real-world challenges. With a focus on sectors like water, sanitation, hygiene, medical technology, and emerging technologies, TECHIN strengthened its commitment to advancing technology and creating meaningful social impact.

35+

Startups
Incubated

₹20 cr+

Fund
Raised

₹25 cr+

Revenue
Generated by
Startups

50+

Founders
Benefited
through EDPs

125+

Jobs
Created

50,000+

Sanitation Products
Installed

500+

Innovations
Evaluated

80 Lakhs+

Lives Positively
Impacted

20 cr+

Litres

Wastewater
Treated

1000+

hours
Mentoring
Hours

200+

Individuals
Trained

50+

Programs &
Cohorts Completed

3.3 STARTUP SUCCESS STORIES



Ensect Farm- Winner of Waste to Wealth Innovation Challenge



Ensect Farm- Aegis Graham bell Award



Nimble Vision- ASCI-MOHUA WaSH Innovation Award- 2024



Femicura- Grant for Early Stage Medtech Innovation (GEMi) by Artixio



Femicura- IITMIC KRIA Award





**Nirgandh- Graduated from the
NASDAQ Milestone Maker Program**



Avinya- National Startup Winner



Viomax- StartupTN Award



**Dhanvantri Biomedical - ATF- Award Winner-
Best Assistive Technology
Startup People's Choice Award**



Ensect Farm- Carbon Zero Challenge Award



Sundarban Chemicals - Innovation in Sanitation Award



Biovidhan- Won 5 lakhs grant from Awardee Scaleup Programme, EC 2023



Cluix- Won 2nd prize in WaSH Innovation Challenge



Biovidhan- Received Award from G20 Summit on Environment Sustainability





4 GLOBAL SANITATION CENTER OF EXCELLENCE (GSCOE)

The Global Sanitation Center of Excellence (GSCOE) at IIT Palakkad is a dedicated initiative initiated and facilitated through the Office of the Principal Scientific Advisor, Government of India. The center works towards developing innovative and practical sanitation solutions, with a strong focus on non-sewered sanitation systems that are especially important in rural areas and underserved urban communities. These efforts aim to address long-standing challenges in access to safe and sustainable sanitation. GSCOE is also an active participant in several national and international networks, collaborating with a wide range of partners to exchange knowledge, share best practices, and collectively advance the sanitation ecosystem across different regions.



Email: office_gscoe@iitpkd.ac.in



Website: gscoe.iitpkd.ac.in

To support its mission, GSCOE is equipped with state-of-the-art laboratory facilities for the testing and analysis of septage, sludge, water, and wastewater. A unique feature of the center is the Engineering Field Testing Platform, established within the IIT Palakkad campus. This platform enables thorough technical evaluation and hands-on testing of new sanitation technologies in real-world conditions. By offering a space where ideas can be tested, improved, and validated, GSCOE plays a crucial role in ensuring that emerging solutions are not just innovative on paper, but are effective, user-centric, and ready for implementation in the field. The center remains deeply committed to supporting inclusive and impactful sanitation efforts through science, technology, and collaboration.





S

ESTABLISHMENT OF NEW TECHNOLOGY VERTICAL

TECHIN Signs MoU with Symega Food Ingredients Ltd.

In the financial year 2024–25, TECHIN expanded its innovation ecosystem by launching a dedicated vertical in the food technology sector, marking a significant step towards diversifying its sectoral focus. This initiative was established in collaboration with Symega Food Ingredients Ltd., a leading company renowned for developing flavours, natural colours, specialty seasonings, and culinary ingredients for the global food and beverage industry. The formal collaboration was initiated through a Memorandum of Understanding (MoU) signed on 6th February 2025 between TECHIN- IIT Palakkad and Symega Food Ingredients Ltd. The MoU was exchanged between Mr. Midhu Unnithan, Chief Operating Officer, TECHIN, and Mr.

Santhosh Stephen and Mr. Paolo George, Directors of Symega Food Ingredients Ltd. This partnership aims to nurture innovation in the FoodTech space by providing startups with access to advanced research facilities, technical mentorship, and valuable industry insights. By combining TECHIN's academic and research strengths with Symega's practical expertise and market understanding, the collaboration seeks to accelerate the development, validation, and commercialization of novel food technologies. The initiative is a reflection of TECHIN's commitment to fostering domain-specific innovation and building strong, outcome-driven industry-academia linkages that can create scalable and impactful solutions in emerging sectors.





6 OUR STARTUPS

NIRGANDH

CLEAN | COMFORTABLE | HEALTHY

WWW.NIRGANDH.COM



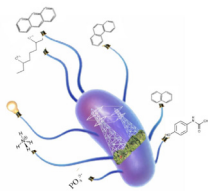
AVINYA INFINITY SOLUTIONS



MUNNARIVON TECHNOLOGIES
PREDICTING HEALTH OF ENGINEERED SYSTEMS



MetaTreat



FemiCura



AI Med



Happy 60 plus





7 INCUBATION PROGRAMS

7.1 SAMAVESH 1.0 - WOMEN ENTREPRENEURSHIP PROGRAM

As part of our commitment to promoting inclusive innovation, TECHIN launched the Women Entrepreneurship Program (WEP 1.0) to support women-led startups in the Water, Sanitation, and Hygiene (WaSH) sector. The program aimed to empower women entrepreneurs by supporting innovative solutions with a Technology Readiness Level (TRL) of 5 and above, helping them take on leadership roles and build sustainable, income-generating ventures. Applications were invited under five key themes: cleaning technologies for better hygiene, improved menstrual hygiene products, smart toilet technologies, nature-based solutions for sewage and greywater treatment, and IoT applications in sanitation. The application window was open from March 8 to April 8, 2024, followed by a structured selection process that included a first pitch round on April 15 and a final pitch round on April 22. The program received strong participation from across the country, and four women-led startups were selected for incubation at TECHIN. Each selected startup

received funding support of up to INR 20 lakhs for product development, pilot implementation, and business support activities essential for scaling their innovations.

**Samavesh / समावेश
WOMEN ENTREPRENEURSHIP
PROGRAM**

**Application deadline extended to :
20th April 2024, 5PM**

Submit your applications using the QRcode

Technology Innovation Foundation of IIT Palakkad (TECHIN) & Global Sanitation Center of Excellence (GSCOE), IIT Palakkad invites applications from women entrepreneurs on innovative ideas in the WaSH domain (Water, Sanitation & Hygiene)

**Apply and get a chance to win
Grant up to Rs. 20 Lakhs**

for more details visit: <https://techin-iitpkd.org/samavesh/>

Collaborators: Parivartan, Bill & Melinda Gates Foundation, LAPMO, TOILET

<https://techin-iitpkd.org> | 8848875281 | office@techin-iitpkd.org

7.2 SAMASTHA 6.0 INCUBATION CALL IN WATER, SANITATION AND HYGIENE SECTOR

Samastha 6.0 was the sixth edition of the online pitch event jointly organized by TECHIN and the Global Sanitation Center of Excellence (GSCOE) at IIT Palakkad. The event focused on identifying innovative solutions in the Water, Sanitation, and Hygiene (WaSH) sector with a Technology Readiness Level (TRL) of 5 or higher.

Applications were invited under defined problem areas, including smart water management, wastewater treatment, non-sewered sanitation, water recycling and reuse, community-led sanitation, nature-based WaSH solutions, reinvented toilet technologies, faecal sludge management, menstrual hygiene products, and IoT applications in sanitation.

Following a structured evaluation process, shortlisted teams participated in the first round of pitching held on 12th and 13th September 2024, where the technical strength and business potential of their solutions were assessed. Shortlisted teams then advanced to the final pitch round on 4th and 5th October 2024. As a result of the selection process, Nine startups were selected for incubation at TECHIN. Each selected team received funding support of up to ₹20 lakhs for product development, pilot implementation, and business support activities essential to scaling their innovations.



7.3 AROGYAM 3.0

INCUBATION CALL IN MEDICAL TECHNOLOGY

Arogyam 3.0, the third edition of TECHIN's MedTech pitch event, supported by West Pharmaceuticals, was launched to identify and nurture innovative solutions in the medical technology sector. The program focused on three thematic areas: Artificial Intelligence and Machine Learning in Healthcare, Robotics and Automation in Medicine, and Pharmaceutical Innovations. It aimed to incubate and support high-potential startups by providing access to mentorship, technical guidance, and business development opportunities to accelerate their growth. All applications were evaluated by a panel of experts from TECHIN & West Pharmaceuticals. Shortlisted teams were announced on 24 October 2024 and invited to

present their ideas during the first pitch round held on 6 and 7 November 2024. Based on a detailed assessment of technical strength and commercial viability, three startups advanced to the final pitch round, conducted on 17 December 2024.





8 STARTUPS INCUBATED AT TECHIN: 2024-25

8.1 FEMICURA HEALTHTECH PRIVATE LIMITED

FemiCura HealthTech, onboarded for incubation at TECHIN through Samavesh 1.0, is a women-led startup founded by Mrs. Meenatchi and Mr. Madhan Siva, focused on advancing health and hygiene through innovative products for women and babies. The company develops sustainable maternity pads and baby wet wipes, designed to be safe, effective, and environmentally

friendly, meeting high standards for human and environmental health. With a vision to improve access to postpartum hygiene solutions, FemiCura addresses critical hygiene challenges faced by women. Its mission is to deliver affordable, high-quality hygiene products that cater to the specific needs of women and infants.

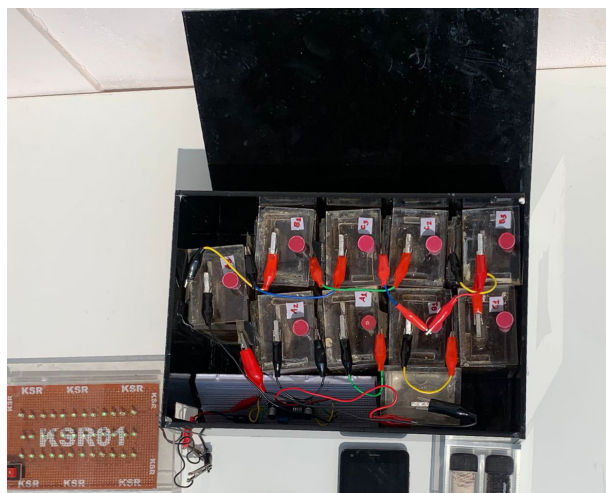


"Develops safest and effective sustainable hygiene products for women and babies."

8.2 PRITVICHAKR INNOVATIONS PRIVATE LIMITED

PritviChakr Innovations, founded by Dr. Praveena Gangadharan, Assistant Professor, IIT Palakkad, and Ms. Sangeetha V, Research Scholar, IIT Palakkad, has been onboarded for incubation at TECHIN through Samavesh 1.0. PritviChakr Innovations, is a startup focused on developing practical solutions for managing water and energy in an environmentally friendly way. The startup is working on a small, easy-to-use system that treats waste water collected separately from toilets. This system helps recover clean water, useful nutrients, and energy,

without needing an outside power supply. The treated water can be reused for purposes like toilet flushing, which helps reduce the use of fresh water. The units are designed to be compact and can be installed in homes, villages, or larger buildings. They are especially useful in places that do not have access to large treatment facilities. By helping people manage their own water and energy needs, PritviChakr Innovations is supporting healthier communities and a cleaner environment.



"An energy-neutral closed-loop system for decentralized resource recovery from source-separated urine."

8.3 BACTREAT ENVIRONMENTAL SOLUTIONS PRIVATE LIMITED

BacTreat Environmental Solutions, founded by Prof. Anasuya Ganguly and Prof. Srikanth Mutnuri, has been onboarded for incubation at TECHIN through Samavesh 1.0. The Startup focuses on developing eco-friendly solutions for wastewater and organic waste treatment. The startup designs compact systems suitable for homes, communities, and institutions. A key solution developed by BacTreat is a natural wastewater treatment system using vertical wetlands, which has been installed at various scales, including a household, a community,

and a school in Goa. They have also established a treatment plant for septic tank waste, where nutrients are recovered, and the solid waste is converted into Terra Preta, a nutrient-rich compost that supports long-term soil health. In addition, BacTreat treats kitchen and food waste through a process that produces biogas and natural fertilizer, offering a sustainable way to manage organic waste. Through these initiatives, the startup supports cleaner environments and improved waste management at the local level.



"Develops vertical flow constructed wetlands as decentralized, nature-based wastewater treatment systems."

8.4 BIOVIDHAN

BIOVIDHAN, founded in 2021 by Ms. Pooja Deshpande, operates in the cleaning solutions industry, delivering a wide range of products designed to enhance hygiene in households and workplaces. Its product portfolio includes laundry liquid, toilet cleaner, dish wash, water tank cleaner,

and kitchen and fridge cleaner. Committed to quality and sustainability, BIOVIDHAN focuses on formulating cleaning solutions that are both effective and environmentally responsible, aligning with modern standards for health, hygiene, and eco-conscious living.



"Manufacturer of bio-enzyme based natural cleaners and bio cultures."

8.5 DHANVANTRI BIOMEDICAL PRIVATE LIMITED

Dhanvantri Biomedical, founded by Mrs. Sruthi Babu and Mrs. Priyanka Babu, has been onboarded for incubation at TECHIN through Samastha 6.0. Operating under the brand name Sahayatha Healthcare, the startup is dedicated to improving the quality of life for mobility-impaired individuals through innovative assistive solutions. Their product, the Sahayatha Wheelchair, features an inbuilt commode with advanced self-cleaning

technology, offering unmatched comfort, hygiene, and convenience. By combining functionality with dignity, the wheelchair promotes greater independence and ease of use for its users. Dhanvantri Biomedical's mission is to create accessible, user-centric, and affordable healthcare innovations that empower individuals and foster a more inclusive society.



FEEL THE FREEDOM

of a deep clean with the power of a smart cleansing device.



Sahayatha

AGEING DOESN'T HAVE TO BE A BURDEN

of a deep clean with the power of a smart cleansing device.



"Advanced Mobility Solution with Defecation - Cleansing Support."

8.6 COSMOVEND AUTOMATIONS PRIVATE LIMITED

Cosmovend Automations, founded by Mr. Stanly C. G and Dr.Mohankumar K, has been onboarded for incubation at TECHIN through Samastha 6.0. The startup focuses on public sanitation and is the creator of IPtoilet, a smart public toilet system with over 400 installations across India. IPtoilet enhances public hygiene by providing durable, easy-to-maintain toilets designed for busy urban areas. The

company collaborates with local organizations to manage the facilities, creating jobs and promoting proper upkeep. Featuring automated cleaning and remote monitoring, toilet remains clean and ready for use with minimal manual effort. Built with eco-friendly materials and designed to be accessible for all users, IPtoilet delivers safe, clean, and sustainable sanitation solutions to urban communities.



"Retail shop and a fully integrated toilet, providing convenience and multi-functionality for outdoor markets and public spaces."

8.7 REHUMUS TECHNOLOGY PRIVATE LIMITED

Rehumus Technology, founded by Dr. Deepak Jaiswal, Assistant Professor at IIT Palakkad, and Ms. Jayalekshmi T R, Research Scholar at IIT Palakkad has been onboarded for incubation at TECHIN through Samastha 6.0. Rehumus Technology is dedicated to transforming waste into valuable resources. Focused on sustainable solutions in waste management, sanitation, and resource

utilization, they specialize in converting bio-solid waste into Eco-friendly fertilizers that support sustainable agriculture. By leveraging cutting-edge technologies such as modeling and machine learning, they optimize sludge management systems to enhance soil health, reduce reliance on chemical fertilizers, and improve soil carbon sequestration, contributing to climate change mitigation.

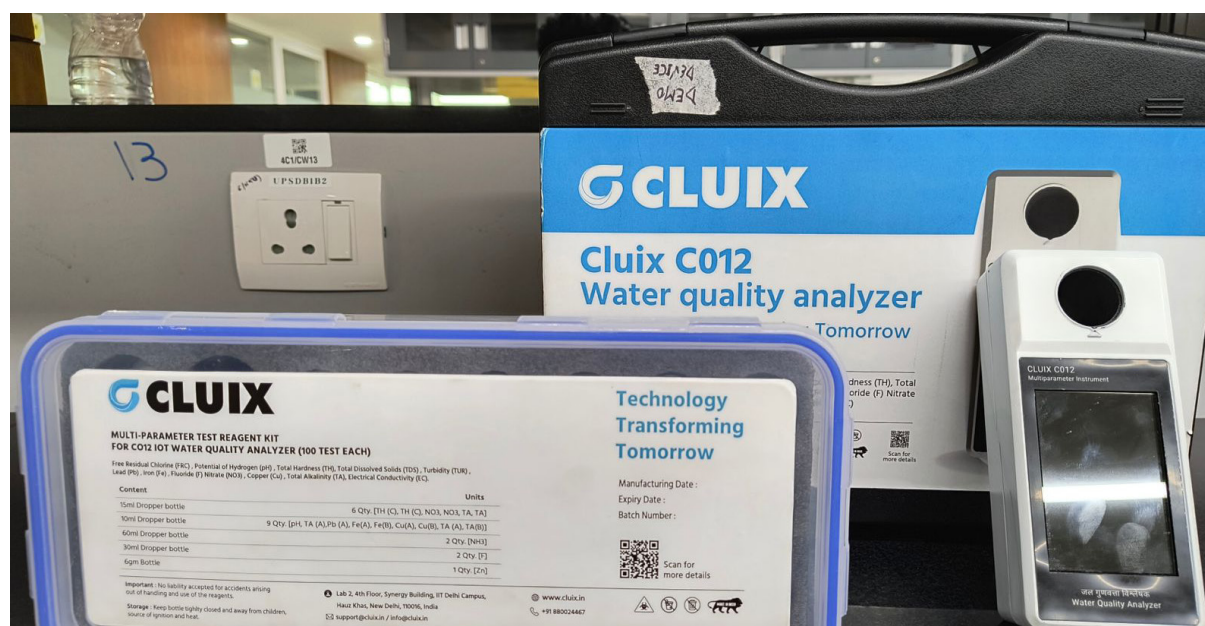


"Recycling Carbon and Nutrients by Land Application of Biosolids."

8.8 CLUIX PRIVATE LIMITED

Cluix Private Limited, founded by Mr. Robin Singh and Mr. Chitransh Singh, has been selected for incubation at TECHIN through Samastha 6.0. Cluix works on improving water quality monitoring using smart connected devices. The company's goal is to help solve the global water crisis by providing real-time, accurate water quality information

to communities, businesses, and governments. Their main product is a portable device that tests 13 important water quality factors and sends the results to a central system for quick review and action. Cluix's technology helps both rural and urban areas to access safe and clean drinking water.



"Digital multiparameter water quality analyzer powered by IoT"

8.9 AQUALYS WATER TECHNOLOGIES

PRIVATE LIMITED

Aqualys Water Technologies, founded by Dr. Syriac Joseph Palackal, Mr. Tony Sebastian, and Mr. Boney Antony, has been onboarded for incubation at TECHIN through Samastha 6.0. The startup focuses on developing solutions to clean water by removing harmful chemicals such as metals, fertilizers, pesticides, and antibiotics. Their technologies

help in both purifying and reusing water, making it safe for use and better for the environment. By addressing pollution from industries and farming, Aqualys supports better water use practices and helps reduce water shortages and environmental damage.



"Advanced oxidation through photocatalysis and micro/nanobubbles, enhanced by a unique catalyst for complete wastewater reuse."

8.10 SUNDARBAN CHEMICALS PRIVATE LIMITED

Sundarban Chemicals, founded by Dr. Sashanka Sekhar Mandal, Mr. Suvadeep Panty and Mr. Surajit Kundu have been onboarded for incubation at TECHIN through Samastha 6.0. The Startup specializes in managing hazardous liquid waste, particularly from healthcare facilities. The startup's main product, Herfom, is a ready-to-use system that safely treats harmful liquid

waste in a simple and efficient manner. Supported by a team with experience in chemical engineering, product design, and water treatment, the company focuses on using modern technologies to provide compact and effective solutions. Operating across India, Sundarban Chemicals aims to improve public health, support environmental safety, and promote sustainable practices.

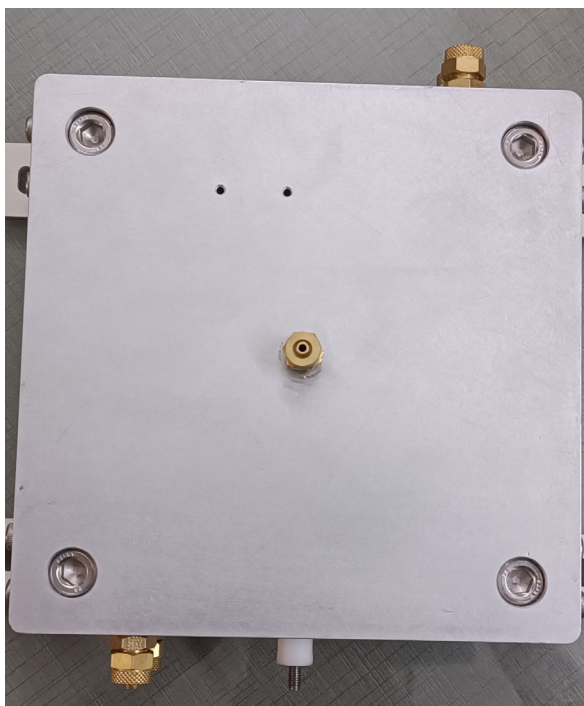


"Electrocoagulation/ Electro-oxidation based effluent treatment system."

8.11 VIOMAX ENVIRO SOLUTION PRIVATE LIMITED

Viomax Enviro Solution Private Limited, founded by Mr. Hariharan Muthusamy and Mr. Karthikeyan Dhanasekaran, has been onboarded for incubation at TECHIN through Samastha 6.0. The startup focuses on eco-friendly and chemical-free methods for treating wastewater. It designs and

manufactures ozone-based systems to improve water treatment in a safe and efficient way. Viomax aims to offer practical and sustainable solutions that help provide clean and safe water, while also protecting the environment.



"A ceramic - based dielectric barrier discharge ozone generator, used for waste water treatment."

8.12 VERTOX LABS PRIVATE LIMITED

VertoX Labs Private Limited, founded by Ms. Salomi Dabral and Ms. Sheetal Priyadarshini, has been onboarded for incubation at TECHIN through Samastha 6.0. The startup develops tools and systems to help monitor and manage wastewater and water quality. Using custom-built sensors and

smart systems, VertoX Labs helps users track changes in water conditions more easily and accurately. Their solutions provide real-time information, enabling quicker decisions and reducing costs by up to 30% compared to traditional methods.

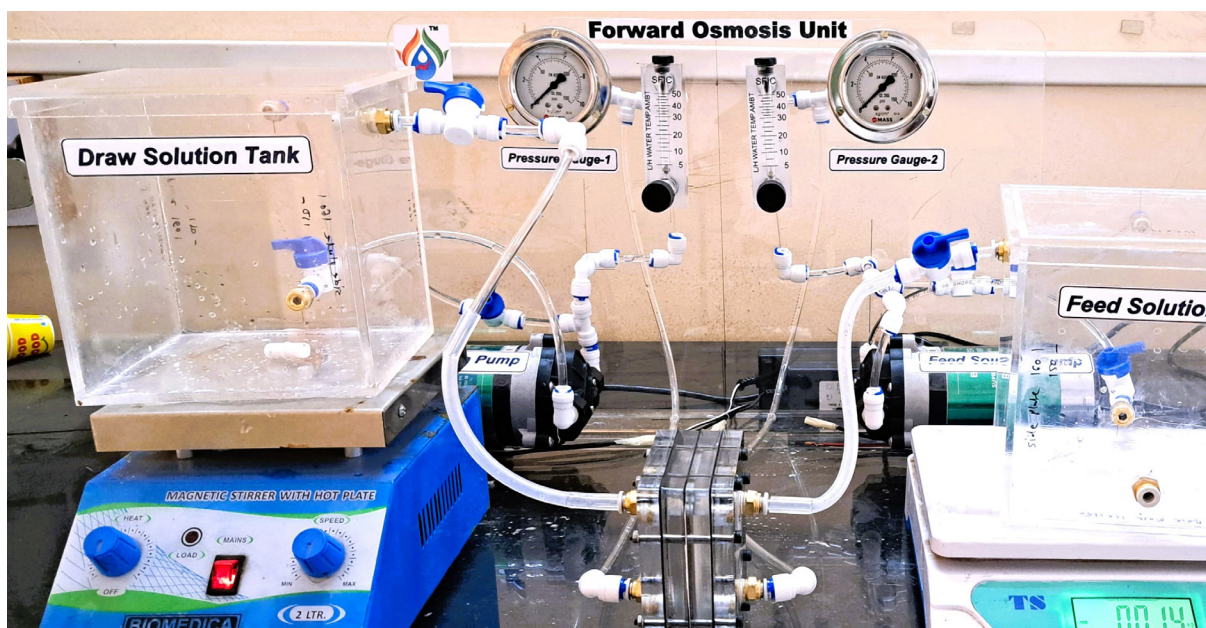


"Implements robotics and in-house built sensors & cyber physical systems to implement a range of solutions in wastewater management & water quality monitoring."

8.13 AARVI ENERGY FILTREX AND ENVIRONMENTAL SOLUTIONS PRIVATE LIMITED

Aarvi Energy Filtrex and Environmental Solutions, founded by Dr. Amol Vijay Sonawane and Mr. Yogesh V. Sonawane, has been onboarded for incubation at TECHIN through Samastha 6.0. The startup manufactures products used for filtration, separation, and purification, and also offers consulting in intellectual property (IPR). Aarvi Energy develops solutions that help industries

address environmental challenges while improving efficiency. The company produces components for hydrogen fuel cells and electrolysis, serving industries across the globe. Its offerings include membrane-based separation systems and other environmental services, with a strong focus on reliability, sustainability, and reducing environmental impact.



"Sustainable Electroconductive Moving Bed Membrane Bioreactor for Wastewaters Treatment."

8.14 REVIN TECHNO SOLUTIONS PRIVATE LIMITED

Revin Techno Solutions Pvt Ltd, founded by Mr. Sreehari V, Dr. Satyajit Das, and Dr. Sreenath Vijayakumar, is an agritech startup onboarded for incubation at TECHIN. The company develops technology-based solutions to support smart and sustainable farming. Its systems combine sensors,

automation, and tracking tools to help farmers grow the right crops using best practices in suitable locations. With roots at IIT Palakkad, Revin Techno Solutions aims to make farming more efficient and reliable, contributing to secure and scalable food production.

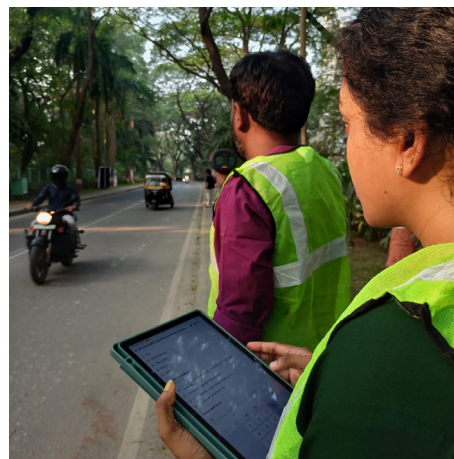


"Develop data-driven IoT solutions for alternate farming, including sensing, automation and traceability."

8.15 DROMOLYS RESEARCH AND DEVELOPMENT PRIVATE LIMITED

Dromolys Research and Development, founded by Dr. Suvin P. V., Dr. Shilpa R. Nair, Mr. Praveen M. P, and Mr. Ishant Bonde, is incubated at TECHIN. The startup is dedicated to advancing transportation systems and infrastructure through innovative research, state-of-the-art technology, and comprehensive solutions. Their mission is

to revolutionize the field of transportation by enhancing safety, efficiency, and sustainability. With a strong focus on Intelligent Transportation Systems (ITS), urban infrastructure, and environmental resilience, Dromolys aims to set new industry standards and contribute to developing smart cities and sustainable communities.

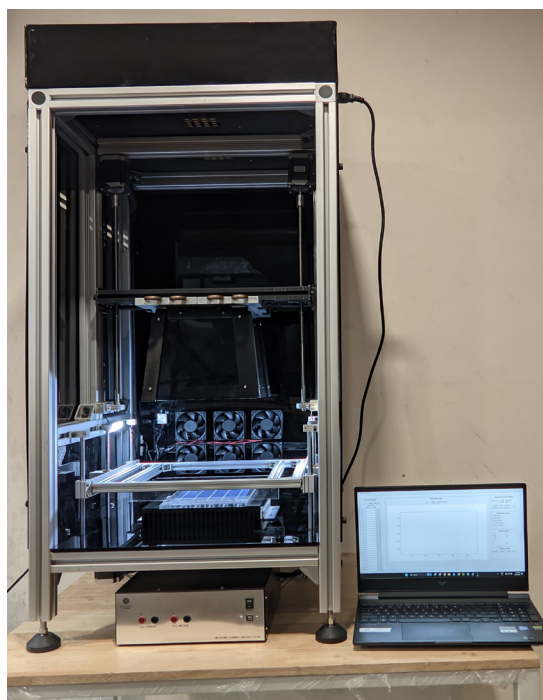


"Innovation in the transportation sector, dedicated to transforming systems and infrastructure through cutting-edge research and technology."

8.16 BUMBLEBEE INSTRUMENTS PRIVATE LIMITED

Bumblebee Instruments, founded by Dr. Arvind Ajoy, Associate Dean, ICSR at IIT Palakkad, along with Mr. Ananthu Sasikumar and Mr. Abhinav R., is committed to developing advanced scientific instrumentation that supports a wide range of research and development activities. The company's expertise spans diverse domains, including cell characterization, solar-powered

appliances, OPU-based Micro-Electro-Mechanical Systems (MEMS), XY stages, lock-in amplifiers, and specialized kits for STEM education. These innovative solutions are designed to enhance precision, efficiency, and accessibility in scientific research, reinforcing Bumblebee's contribution to cutting-edge technological innovation.



"Specialized in developing state of the art instrumentation, catering to a wide range of research and development."



9 WORKSHOPS, TRAINING AND SKILL DEVELOPMENT

9.1 INNOVATE KERALA - DPIIT - KSUM ID DRIVE FOR STARTUPS

TECHIN, in collaboration with Kerala Startup Mission, hosted the DPIIT-KSUM UID Drive Workshop on 17th May 2024. The workshop was designed to help startup founders obtain their Unique Startup IDs under the Startup India (DPIIT) and Kerala Startup Mission (KSUM) frameworks.

These IDs provide access to essential support such as government funding, mentorship, incubation,

and other growth opportunities. The session drew participation from early-stage entrepreneurs, student innovators, technologists, and startup founders. The workshop helped startups gain official recognition, contributing to the growth of Kerala's startup ecosystem.



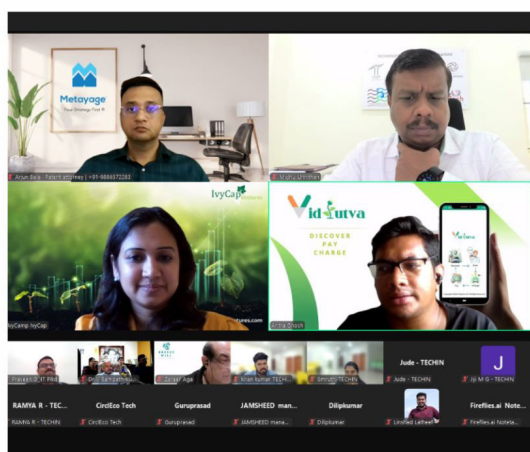
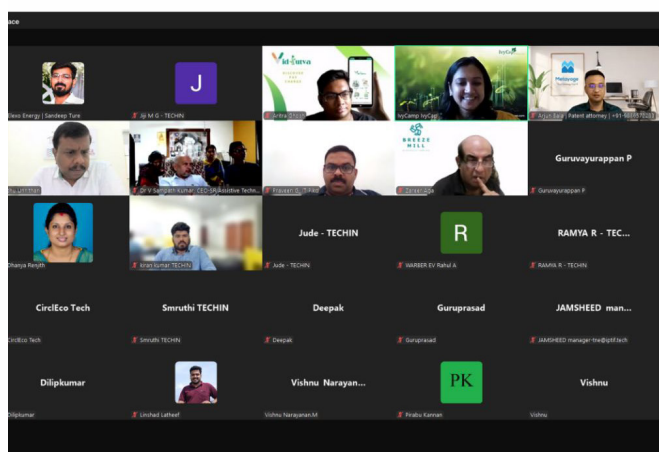
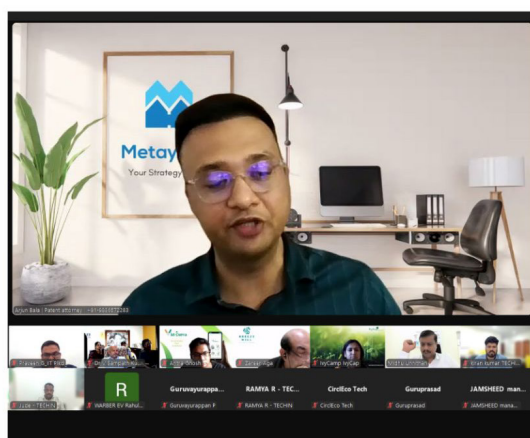
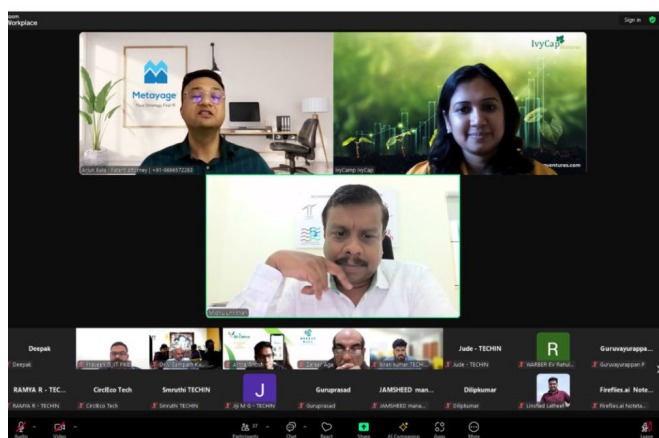
9.2 SESSION ON THE IMPORTANCE OF INTELLECTUAL PROPERTY

As part of our ongoing commitment to fostering innovation and a strong IP culture, TECHIN and IPTIF coordinated an “Ask Me Anything” session on the Importance of Intellectual Property on 22nd August 2024.

Hosted by IvyCamp, the session featured Mr. Arjun Bala, Managing Partner and Patent Agent at Metayage and IIT Bombay alumnus, who shared valuable insights tailored for startups, researchers, and innovators. Topics covered included patent strategies, IP lifecycle management, and common challenges faced by early-stage ventures.

The interactive event saw active participation from TECHIN-incubated startups, IIT Palakkad researchers, and entrepreneurs. It aimed to raise awareness and equip participants with practical knowledge to protect their innovations and make informed IP decisions.

This initiative reflects TECHIN’s and IPTIF’s shared mission to support startups by providing not only infrastructure and funding but also expert guidance on critical topics like Intellectual Property.



9.3 CERTIFIED PLUMBING TECHNICIAN

The Certified Plumbing Technician Programme is a key initiative focused on raising plumbing standards and developing skilled professionals in the Palakkad region and beyond. This comprehensive upskilling program is jointly recognized and certified by the Centre for Continuing Education, IIT Palakkad (CCE) and the Technology Innovation Foundation of IIT Palakkad (TECHIN), in collaboration with the International Association of Plumbing and Mechanical Officials (IAPMO), India. It equips participants with essential knowledge and practical skills in advanced plumbing techniques, including the installation, repair, and maintenance of piping systems and fixtures used in water distribution and wastewater management. By understanding the fundamental principles of plumbing systems, participants are prepared to effectively apply

their skills in real-world settings. To date, over 150 candidates have been certified through this program, demonstrating its impact in creating proficient plumbing technicians.

The ninth batch of the program, sponsored by the Gates Foundation and held at the TECHIN office, successfully concluded on 7th October 2024, with 13 candidates completing the training. During the valedictory function, certificates and plumbing tool kits were awarded to the participants who successfully completed the program. This initiative highlights the strong partnership between industry and academia, playing a key role in skill development and enhancing job opportunities in the region.



9.4 SESSIONS ON ENTREPRENEURSHIP & INCUBATION FOR STUDENTS

As part of its continued efforts to foster innovation and entrepreneurial thinking among young minds, TECHIN conducted a series of interactive sessions for students of Ahalia School of Commerce and Mathematics and Ahalia School of Management, Palakkad. These sessions were designed to introduce students to the fundamentals of entrepreneurship, the startup ecosystem, and the critical role of incubators in supporting early-stage ventures.

The first session, organized for students of the Ahalia School of Commerce and Mathematics, featured Mr. Midhu Unnithan, Chief Operating Officer, TECHIN. Mr. Midhu Unnithan delivered an insightful and engaging session on startups and incubation activities, offering students a practical understanding of how innovative ideas can be nurtured into successful ventures. His

talk emphasized the importance of mentorship, innovation, and a supportive ecosystem in enabling entrepreneurial success, inspiring students to consider entrepreneurship as a viable career path.

The second session, held for students of the Ahalia School of Management, continued the focus on entrepreneurial development. It provided deeper insights into the journey of a startup, highlighting both the opportunities and challenges young entrepreneurs may encounter. The session encouraged students to think critically, develop problem-solving mindsets, and explore real-world business scenarios.

These sessions underscore TECHIN's commitment to building an innovation-driven culture and equipping the next generation with the knowledge and confidence to become future entrepreneurs and changemakers.



9.5 ENTREPRENEURSHIP DEVELOPMENT PROGRAMME FOR STARTUPS - IIM KOZHIKODE

As part of its mission to promote innovation-led entrepreneurship, TECHIN, in collaboration with the Indian Institute of Management Kozhikode (IIMK), conducted a 12-day online Entrepreneurship Development Programme (EDP) from March 12–23, 2025. Designed to strengthen the entrepreneurial, strategic, and leadership capabilities of startup founders, the 36-hour programme brought together academic excellence, industry experience, and investor perspectives to deliver a well-rounded learning experience.

The programme witnessed participation from around 50 startup founders, all of whom successfully completed the training and received certification. The sessions were led by renowned faculty from IIM Kozhikode—including Prof. S. Venkataraman, Prof. Saji Gopinath, and Prof. Ashutosh Sarkar—under the academic guidance of Prof. Deepak S. Kumar, Chairperson – eMDP/MDP/FDP. In addition, experienced industry experts and investors contributed practical

insights, making the sessions highly engaging and application-oriented.

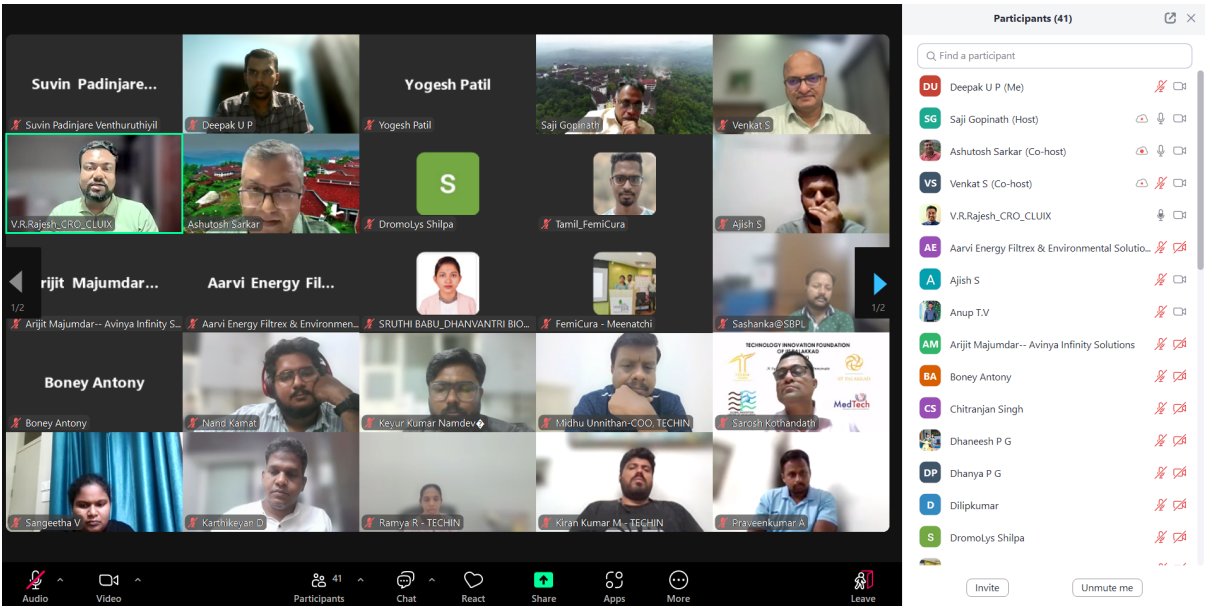
The curriculum was structured into three key modules:

- **Managing Self:** Focused on self-leadership, developing an entrepreneurial mindset, and applying innovation frameworks. Sessions included Business Model Canvas, Organizational Innovation, and Entrepreneurial Strategy.
- **Managing Business:** Covered the operational, financial, and strategic aspects of building a business, with sessions on Financial Management for Startups, Design Thinking & Idea Validation, Legal Compliance, Team Building, and Operational Excellence.
- **Leveraging the Environment:** Provided insights into the broader startup ecosystem and strategies for engaging with external stakeholders. Topics included Funding Strategies, Investor Pitching, and Effective Storytelling.



Funded by HDFC Bank Parivartan, the programme significantly contributed to the professional development of participating entrepreneurs. It reflects TECHIN's continued commitment

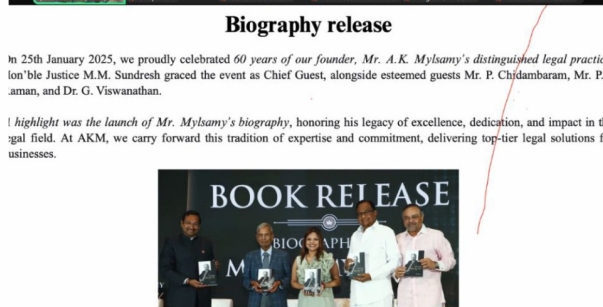
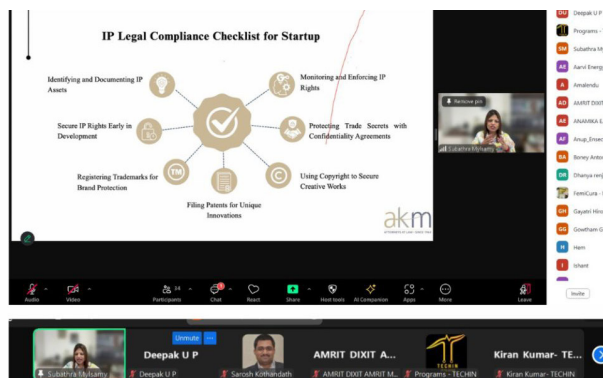
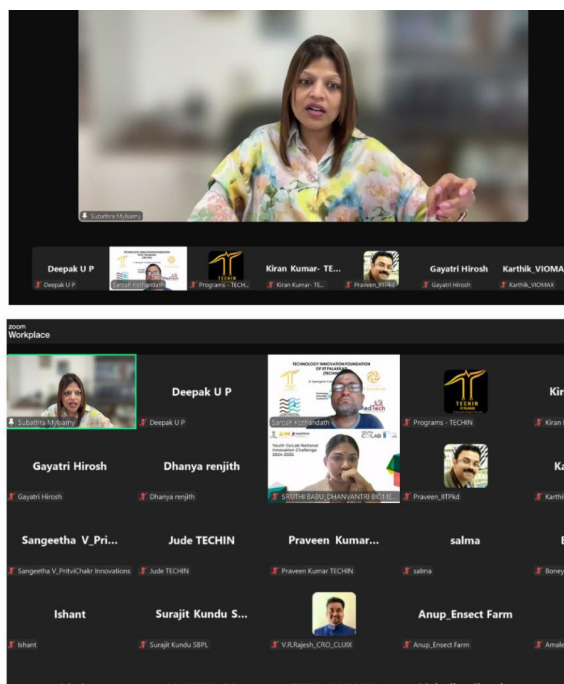
to empowering startups with the necessary knowledge, skills, and networks to build scalable, impactful ventures and thrive in a competitive business landscape.



9.6 TECHINSPIRE SERIES

TECHINspire is an initiative by TECHIN that serves as a vibrant platform for innovators, entrepreneurs, students, researchers, and industry professionals to connect, share knowledge, and support each other's growth. Through engaging sessions, TECHINspire

fosters peer learning, encourages the exchange of ideas, and opens up opportunities for collaboration and growth. By bringing together experienced leaders and aspiring changemakers, the series continues to nurture a culture of innovation and entrepreneurship.



Session 1 – Meet the Founder

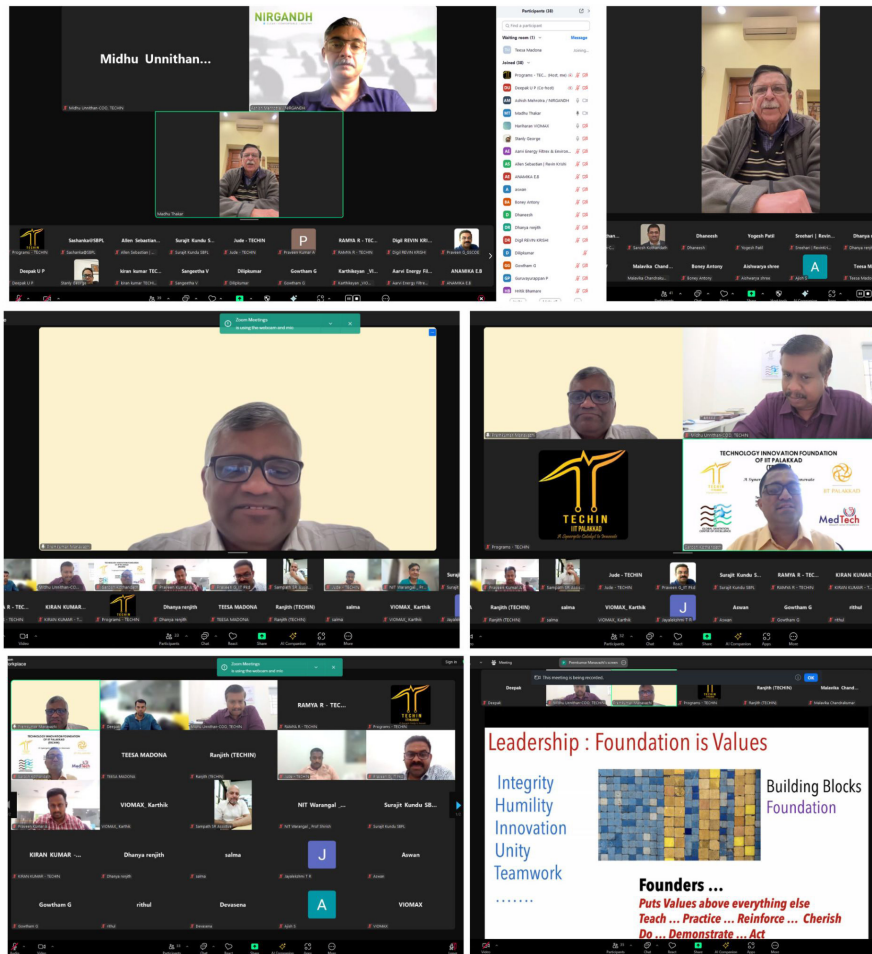
Held on 24th January 2025, the inaugural session of TECHINspire featured Mr. Madhu Thakar (Founder) and Mr. Ashish Mehrotra (Co-Founder) of Nirgandh India, a startup working on sustainable sanitation solutions. The session focused on their entrepreneurial journey, offering valuable insights into building and scaling impact-driven startups in the sanitation space.

The founders shared their experiences, challenges, and learnings from ideation to execution, highlighting key strategies that helped them navigate the startup ecosystem. They also engaged in an interactive discussion with participants, encouraging open dialogue around innovation, sustainability, and social impact.

The session was well-received by TECHIN's startup community and marked a strong beginning to the TECHINspire series—an initiative aimed at motivating and educating aspiring entrepreneurs through real-world founder stories and peer learning.

Session 2 – Entrepreneurial Leadership

On 20th February 2025, the second session of the TECHINspire series focused on the theme of Entrepreneurial Leadership. The session was led by Mr. Premkumar M, Mentor at TECHIN and Former Managing Director of Caterpillar Inc. (Thailand) Ltd., who brought decades of leadership and industry experience to the discussion.



Mr. Premkumar shared his professional journey, offering valuable perspectives on leadership in dynamic and high-growth environments. Drawing from his global corporate experience, he provided actionable guidance on cultivating leadership mindsets, navigating uncertainty, building resilient teams, and aligning vision with execution—key elements for startup success.

The session was highly engaging and provided TECHIN's startup community with practical insights to strengthen their leadership capabilities and scale their startups with confidence.

Session 3 – Future-Proofing Startups: Legal Essentials

Coinciding with International Women's Day, the third session of the TECHINspire series was held on 8th March 2025 and featured Ms. Subathra Mysamy, Managing Partner at A.K. Mysamy & Associates LLP.

A distinguished legal professional with extensive experience in corporate law, delivered an insightful session focused on the legal foundations essential for startup success.

The session addressed critical topics such as intellectual property rights, contract management, regulatory compliance, and legal risk mitigation—key areas that startups must navigate carefully. It provided practical legal frameworks to help structure operations effectively, safeguard innovations, and ensure long-term sustainability. The session also encouraged meaningful dialogue, with participants engaging in discussions on real-world legal challenges faced by startups. It highlighted the importance of legal literacy in entrepreneurship and contributed significantly to building awareness among TECHIN's startup community.



10 SAMAVESH - WOMEN ENTREPRENEURSHIP PROGRAM: STARTUP ONBOARDING EVENT

On November 11, 2024, Technology Innovation Foundation of IIT Palakkad (TECHIN) hosted a Startup Onboarding Event at the IIT Alumni Centre, Bengaluru, to welcome a new group of women-led startups in the Water, Sanitation, and Hygiene (WaSH) sector, identified through the SAMAVESH program. This event highlighted TECHIN's commitment to supporting inclusive innovation and promoting women entrepreneurs.

Prof. A. Seshadri Sekhar, Director of IIT Palakkad and Chairman of TECHIN, inaugurated the event, emphasizing the role of technology-driven

entrepreneurship in solving social challenges and the importance of institutional support. Dr. Arvind Ajoy, Associate Dean (ICSR), IIT Palakkad, spoke about the institute's growing innovation ecosystem and the value of academic-industry collaboration.

As part of the onboarding, Four women-led startups were onboarded: PritviChakr Innovations Private Limited, Bactreat Environmental Solutions, FemiCura HealthTech Pvt. Ltd., and Biovidhan all focused on sustainable WaSH solutions aligned with social impact goals.



The program included a series of insightful technical and business sessions led by distinguished domain experts:

- Prof. Hoysala N Chanakya, Chief Research Scientist, Centre for Sustainable Technologies, IISc
- Dr. Indira Singh, Lead, School of Environment and Sustainability, Indian Institute for Human Settlements (IIHS)
- Mr. S. Muralidharan, Chairman, Mobility Aftermarket
- Mr. C. S. Pradhyumna, CEng MICE, Senior Vice President, Infrastructure Development Corporation (Karnataka)

As part of the event, a panel discussion titled Inclusive Sanitation: Opportunities and Challenges was held to explore key issues and solutions in the WaSH sector. Moderated by Dr. Devasena M, Chief Technology Officer at GSCOE, the session featured expert insights from leaders across academia,

government, and the social sector:

- Dr. Priyanka Jamwal, Programme Leader, Water and Society Programme – ATREE
- Ms. Sandhya Haribal, Senior Program Manager, CDD Society
- Dr. Nidhya Nadarajan Joghee, Project Manager, Bengaluru Science & Technology Cluster (BeST)
- Dr. Maheshwari Madhava, Special Technical Officer to the Health Commissioner, BBMP

The discussion provided practical perspectives on inclusive approaches, policy gaps, and opportunities for innovation in sanitation.

The Startup Onboarding Event marked an important milestone in TECHIN's ongoing efforts to promote inclusive, women-led innovation in the WaSH sector. By bringing together experts, entrepreneurs, and policymakers, the event fostered valuable knowledge exchange and laid the foundation for collaborative action.







11

TECHIN STARTUP CONCLAVE - SAMAGRA 2025

Technology Innovation Foundation of IIT Palakkad (TECHIN), in collaboration with HDFC Bank Parivartan, has been at the forefront of nurturing innovation in the Water, Sanitation, and Hygiene (WaSH) sector for nearly three years. Through its dedicated incubation program, TECHIN has supported around 25 startups across India, enabling the development of impactful technologies addressing critical challenges in sanitation and hygiene.

As part of this ongoing initiative, Samagra 2025 – TECHIN SaniTech Startup Conclave was organized on March 26–27, 2025 at Grand Meydan, Distrikt 9, Palakkad. The two-day conclave brought together entrepreneurs, policymakers, industry experts,

and sector leaders for meaningful discussions on innovation, entrepreneurship, and the future of sanitation technology.

Event Overview

The conclave featured an interactive startup exhibition showcasing the innovations of 17 TECHIN-incubated SaniTech startups. These startups presented a range of technologies and solutions aimed at addressing sanitation challenges in urban and rural contexts. The exhibition served as a platform for visibility, networking, and collaboration, attracting stakeholders from government, academia, and industry, and offering founders valuable feedback and engagement opportunities.



Day One:

Inaugural Session

The conclave was inaugurated by Prof. A. Seshadri Sekhar, Director, IIT Palakkad and Chairman, TECHIN, with the welcome address delivered by Dr. Arvind Ajoy, Associate Dean, ICSR, IIT Palakkad.

Keynote speakers included:

- Prof. Saji Gopinath, Professor, IIM Kozhikode
- Mr. Viju Parameshwar, Former CEO India, Freudenberg Group & Advisory Council Member, IIT Palakkad
- Mr. S. Muralidharan, Chairman, Mobility Aftermarket

EDP Certification

A special segment of the event was the Entrepreneurship Development Program (EDP) certificate distribution, conducted in partnership with IIM Kozhikode and HDFC Bank Parivartan. Certificates were awarded by Prof. A. Seshadri Sekhar and Prof. Saji Gopinath, recognizing the efforts of nearly 50 startup founders who completed the program.

Showcasing Innovation & Impact

Dr. Praveena Gangadharan presented the ongoing work of the Global Sanitation Center of Excellence

(GSCOE), outlining its contributions to research, product development, and capacity-building in the sanitation ecosystem. The session concluded with a Vote of Thanks by Mr. Midhu Unnithan, Chief Operating Officer, TECHIN.

An interactive startup exhibition followed, where TECHIN-incubated startups demonstrated their products and technologies, offering a valuable platform for networking, collaboration, and exposure to emerging trends.

Panel Discussion: Entrepreneurship & Business Growth

A panel discussion on entrepreneurship and business growth featured insights from:

- Mr. Premkumar, Industry Expert, Leadership Thinker
- Dr. Saishyam Narayanan, CEO, IPTIF, IIT Palakkad
- Dr. Kesavachandran C., CSIR-NIIST
- Raja Rajeev Kumar, Entrepreneur and Mentor
- Moderator: Dr. Sarosh Kothadanth, Project Manager, TECHIN

The discussion addressed strategies for scaling innovations, market access, investor engagement, and long-term sustainability in the sanitation sector.



Startup Pitch Session

The day concluded with a startup pitch session that provided entrepreneurs with an opportunity to present their solutions and receive constructive feedback from experts, helping them refine their business models and strategies.

Day Two:

Session on Emotional Quotient & GSCOE Visit

The second day began with a session on Emotional Quotient in Leadership, designed specifically for startup founders. Led by Ms. Vinitha Joseph, the session focused on developing self-awareness, emotional intelligence, and effective communication—key attributes for leading high-impact ventures. The session was highly interactive and included several activities, allowing participants to engage deeply with the concepts and reflect on

their own leadership styles. This hands-on approach helped reinforce the importance of emotional resilience and interpersonal skills in navigating the entrepreneurial journey.

The conclave concluded with a guided visit to the Global Sanitation Center of Excellence (GSCOE) laboratory, offering participants an opportunity to explore its state-of-the-art infrastructure. The lab is equipped with advanced facilities for the testing and analysis of septage, sludge, water, and wastewater, supporting rigorous technical evaluation and field validation of sanitation technologies. The visit highlighted GSCOE's ongoing R&D efforts and its role in strengthening innovation capabilities within the WaSH sector. It also reinforced TECHIN's commitment to providing a comprehensive support ecosystem for sanitation-focused startups, enabling them to develop, test, and scale impactful solutions.







12 PROGRAMS & INITIATIVES

12.1 IIT PALAKKAD TECH CONNECT

In a significant step toward fostering regional innovation and strengthening industry-academia collaboration, IIT Palakkad, in collaboration with IIT Palakkad Technology IHub Foundation (IPTIF) and the Technology Innovation Foundation of IIT Palakkad (TECHIN), organized its first industry connect meet—"IIT Palakkad Tech Connect @ Coimbatore"—on 21st August 2024.

The event brought together over 130 participants from more than 70 industries, highlighting IIT Palakkad's growing engagement with the industrial ecosystems of Tamil Nadu and Kerala. Aligned with national priorities such as Aatmanirbhar Bharat and Vision 2047, the discussions focused on collaborative opportunities in technology development, joint research, product innovation, skill development, and entrepreneurship.

Prof. A. Seshadri Sekhar, Director of IIT Palakkad, inaugurated the event and outlined the institute's

vision for "Design & Manufacture in India." The event also featured Air Commodore Vishnu Gaur, Air Commanding Officer from 5 BRD, Sulur, as Guest of Honour, who emphasized the need for strong academic-industry engagement.

As part of the program, Prof. Santhakumar Mohan delivered a detailed presentation highlighting IIT Palakkad's research strengths, advanced facilities, and ongoing innovation initiatives. His talk provided industry stakeholders with valuable insights into how the institute's capabilities can support collaborative R&D and problem-solving.

The event was an important step in IIT Palakkad's efforts to build lasting industry partnerships and promote innovation-driven, sustainable growth in the region.



12.2 MSME TECH CONNECT

On November 9, 2024, IIT Palakkad, in collaboration with the Technology Innovation Foundation of IIT Palakkad (TECHIN) and IIT Palakkad Technology IHub Foundation (IPTIF), hosted the second edition of Tech Connect—a focused one-day conclave aimed at deepening engagement between academia and Micro, Small, and Medium Enterprises (MSMEs) in Kerala. Held on the IIT Palakkad campus, the event brought together nearly 50 MSME representatives from across the state to explore opportunities for collaboration, knowledge exchange, and technology-driven innovation.

The event commenced with a welcome address by Prof. A. Seshadri Sekhar, Director, IIT Palakkad, who emphasized the institute's commitment to supporting industrial growth through cutting-edge research and technical mentorship. This was followed by an inaugural address from Shri A. P. M. Mohammed Hanish IAS, Principal Secretary, Industries Department, Government of Kerala, who underlined the pivotal role of academic institutions in advancing the state's innovation ecosystem.

An overview of IIT Palakkad's industry-academia initiatives was presented by Prof. Santhakumar Mohan, Dean, Industry Collaboration and Sponsored Research (ICSR), and Mr. Midhu Unnithan, Chief Operating Officer, TECHIN, provided a briefing on the day's agenda.

A key component of the event was the guided lab tour, where MSME participants explored IIT Palakkad's advanced research infrastructure, gaining insights into the institute's technical capabilities and collaborative potential.

In the afternoon, thematic group discussions were held between MSME participants and IIT faculty and students across four broad focus areas:

- Group A: Software, Data Analytics, and AI – Facilitated by Dr. C. K. Narayanan and Dr. Mrinal Kanti Das
- Group B: Construction, Manufacturing, and Automation – Led by Dr. Madhu Karthik M., Dr. V. Senthilkumar, Dr. Gokulnath C., Dr. K. V. N. Surendra, and Dr. Dinesh Setti



- Group C: Electrical and Instrumentation – Moderated by a multidisciplinary faculty team including Dr. Revathy Padmanabhan, Prof. T. Sundararajan, Dr. Subrahmanyam Mula, Dr. Naga Brahmdendra, Dr. Jobin Francis, Dr. Vijay Muralidharan, Dr. Sukomal Dey, Dr. Shaikshavali Chitraganti, Dr. Sreenath Vijayakumar, Dr. M Sabarimalai Manikandan, Dr. Sagi Rathna Prasad
- Group D: Agriculture, Materials, and Others – Coordinated by Dr. Dinesh Jagadeesan, Prof. V. Kumar, and SATCARD

Each group engaged in productive discussions addressing current industry challenges, potential areas of collaboration, and the role of academic research in driving industrial innovation. The outcomes of these sessions were later shared in a summary presentation by faculty moderators.

The day concluded with a keynote address by Mr. C. Balagopal, Chairman, Kerala State

Industrial Development Corporation (KSIDC), who highlighted the significance of collaboration between academia and industry. He emphasized the need for shared resources, joint problem-solving, and collective innovation to effectively address industry challenges and scale locally developed solutions for broader impact. This was followed by an open discussion on the way forward, moderated by Dr. Arvind Ajoy, Associate Dean (ICSR), IIT Palakkad. A formal vote of thanks was delivered by Dr. Naga Brahmdendra, Assistant Professor, Department of Electrical Engineering.

Tech Connect 2024 reaffirmed IIT Palakkad's vision of building strong, outcome-oriented linkages between academia and industry. The event opened new avenues for joint projects, technology transfer, and capacity-building initiatives aimed at supporting the innovation and competitiveness of Kerala's MSME sector.



12.3 12th KMTC STAKEHOLDERS CONNECT MEET

On 11th February 2025, the 12th KMTC Stakeholders Connect Meet was jointly organized by IIT Palakkad, Technology Innovation Foundation of IIT Palakkad (TECHIN), and the Kerala Medical Technology Consortium (KMTC). Themed “Fostering MedTech Breakthroughs: The Power of Industry-Academia-Research Partnerships,” the event brought together stakeholders from academia, industry, and the startup ecosystem.

The event was inaugurated by Prof. A. Seshadri Sekhar, Director, IIT Palakkad, who highlighted the potential for a MedTech cluster in Palakkad. Dr. Arvind Ajoy, Associate Dean (ICSR), IIT Palakkad, delivered the welcome address and highlighted the institute’s innovation ecosystem. Key speakers during the inaugural session included Mr. C. Padmakumar, Special Officer, KMTC; Mr. Balagopal Chandrasekhar, Chairman, KSIDC and Advisory Board Member, IIT Palakkad; and Dr. R. Sathyajith, President, IMA Palakkad Chapter.

A dedicated session on Innovations in Medical Technology from IIT Palakkad featured presentations by:

- Prof. Mayank Tiwari, Professor
- Dr. M. Sabarimalai Manikandan, Associate Professor
- Dr. Abdul Rasheed P, DBT Ramalingaswami Fellow
- Dr. Sukomal Dey, Associate Professor
- Dr. Nelson Muthu, Associate Professor
- Dr. Yugender Kotagiri, Assistant Professor

These faculty members showcased their latest research and advancements in the MedTech domain.

Additional expert talks were delivered by:

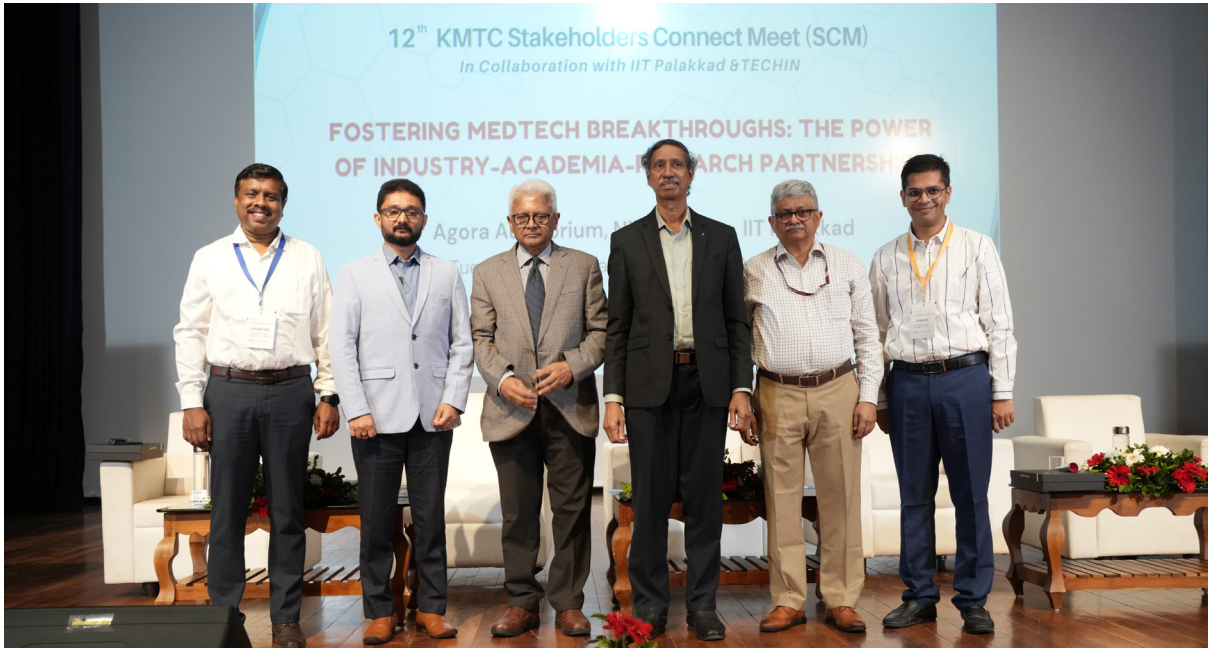
- Mr. Rejeesh G. R., General Manager (Marketing), KMTC
- Mr. Bharat Shankar, Head of R&D, Jayon Implants Pvt. Ltd.
- Dr. Francis B. Fernandez, Scientist-D, SCTIMST
- Dr. Deepu Krishnan P. R., Assistant Manager, KSUM
- Mr. Anil Nair, Co-Founder & CTO, Robo Bionics

The event concluded with a panel discussion on building a MedTech innovation cluster in Palakkad, moderated by Mr. Balagopal Chandrasekhar. The panel included:

- Mr. Anil Kumar Vallil, Chairman, Palakkad Institute of Medical Sciences
- Mr. Jayashankar T. C., Managing Director, Jayon Implants Pvt. Ltd.
- Mr. Midhu Unnithan, Chief Operating Officer, TECHIN, IIT Palakkad
- Ms. Rama Venugopal, Executive Director, Value Added Corporate Services Pvt. Ltd.

The event concluded successfully, highlighting the importance of collaboration and setting the stage for continued growth and innovation in the MedTech sector.







13

ENGAGEMENTS & OUTREACH

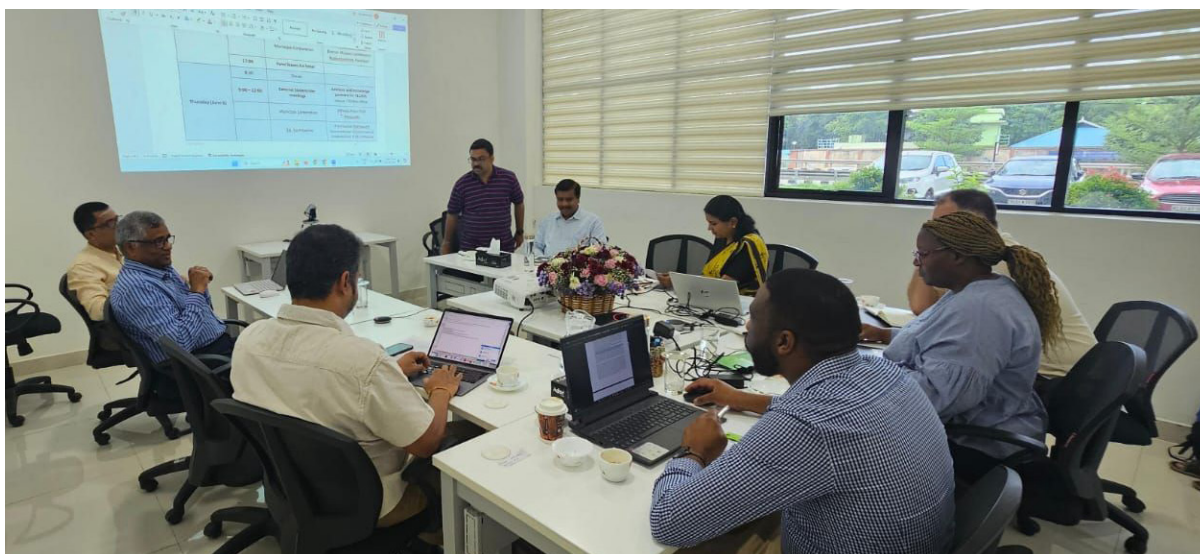
13.1 VISIT BY ISLE UTILITIES EXPERT PANEL

The Global Sanitation Center of Excellence (GSCOE) and the Technology Innovation Foundation of IIT Palakkad (TECHIN) hosted a three-day visit by the Isle Utilities expert team—Dr. Brian Hawkins, Vishwanath Surendiran, Gillian Chigumira, and Dr. Ashton Busani Mpofu—from June 4 to 6, 2024. The visit served as a review of the ongoing initiatives and progress made by GSCOE and TECHIN.

Dr. Devasena, CTO, GSCOE, delivered a detailed presentation highlighting the center’s progress

over the past two years, including infrastructure development, research capabilities, key challenges, and future opportunities. Mr. Midhu Unnithan, COO ,TECHIN, presented an overview of TECHIN’s activities, covering its startup ecosystem, specialized programs, grand challenges, and skill development initiatives.

The team also visited various IIT Palakkad facilities, including the Nirgandh toilet installed on campus—a solution developed by a TECHIN-incubated startup.



13.2 VISIT TO IIT MADRAS

On 27th May 2024, a team from IIT Palakkad, including Prof. Santhakumar Mohan, Dr. Arvind Ajoy, Dr. Vivek Chaturvedi, Dr. Anoop Akkoorath Mana, Mr. Midhu Unnithan, Dr. Saishyam Narayanan, and Mr. Sureshkumar Chekkala, visited the Indian Institute of Technology Madras to discuss collaboration on innovation and entrepreneurship.

During the visit, the team explored key innovation centers such as the Centre for Innovation (CFI) and the Sudha & Shankar Innovation Hub. They gained

valuable insights into best practices that promote entrepreneurial thinking.

Prof. Prabhu Rajagopal, Faculty-in-Charge of the Office of Innovation and Entrepreneurship at IIT Madras, and Mr. Sundarraj E, Project Manager, shared an overview of the institute's ongoing innovation and entrepreneurship activities.

This visit marked an important step toward strengthening collaboration and aligning efforts to foster innovation-driven education.



13.3 STARTUP 360, BY LEAP KERALA STARTUP MISSION

On June 28, 2024, Mr. Midhu Unnithan, Chief Operating Officer, TECHIN, participated as an expert panelist at Startup 360, an event organized by LEAP Kerala Startup Mission in Palakkad. The event brought together leaders from various sectors to engage with aspiring entrepreneurs and early-stage startups.

Mr. Midhu Unnithan joined a panel including Ms. Vinitha Joseph (Founder & CEO, Blue Purple Consulting), Mr. Rajeev Ramanath H (Chartered Accountant & Business Consultant), Adv. Suparna Gopal (IPR Attorney), and Mr. Pradeep Kumar Manapully (Founder, Pravaha Softwares). The session offered valuable insights on business development, intellectual property, financial planning, and startup strategy.

13.4 INTER FOUNDRY MEET

TECHIN participated in the Inter Foundry Event held from August 22 to 24, 2024, at CODISSIA Trade Fair Complex, Coimbatore. This event brought together stakeholders from the manufacturing, foundry, and innovation sectors to share knowledge and explore collaboration opportunities.

IIT Palakkad showcased its facilities that support the manufacturing industry, particularly the foundry sector. TECHIN presented its incubation and training programs, highlighting support for startups and

innovation-driven entrepreneurship. The booth showcased technologies, prototypes, and research projects from the IIT Palakkad ecosystem, covering sectors such as manufacturing, sustainability, healthcare, and automation.

The team engaged with industry leaders, MSMEs, academia, entrepreneurs, and policymakers, sharing details of the institute's research activities, incubation support, product development, and technical training.



13.5. SHOWCASING INNOVATION AT IAC 6.0

On September 21, 2024, startups incubated at TECHIN participated in IAC 6.0 – the sixth edition of the Industry-Academia Conclave held at IIT Palakkad. The event provided a valuable platform for fostering collaboration between academia and industry.

TECHIN-incubated startups showcased innovations across key areas such as water and sanitation, medical technology, sustainability, and other emerging technologies. Their presentations demonstrated meaningful progress, practical applications, and strong potential for scaling.



13.6 TECHIN AND GSCOE AT AFRICA-ASIA NSS WORKSHOP

In September 2024, the Technology Innovation Foundation of IIT Palakkad (TECHIN), along with the Global Sanitation Center of Excellence (GSCOE), participated in the Africa-Asia Research Network on Non-Sewered Sanitation (NSS) collaborative workshop held in Bangkok, Thailand. The event brought together global experts and institutions focused on advancing sustainable and inclusive sanitation solutions.

Representing India, GSCOE & TECHIN team shared their ongoing research and business models in the NSS sector, contributing to discussions on practical approaches for implementing decentralized sanitation systems. The workshop focused on key areas such as technology development, stakeholder engagement, financing strategies, and policy alignment. The engagement strengthened TECHIN's commitment to working with global partners and sharing knowledge in sustainable sanitation.



13.7 DRIVING SUSTAINABILITY: TECHIN AT THE 11th INDIA CSR & ESG SUMMIT 2024

TECHIN participated in the 11th India CSR and ESG Summit 2024, held on 17th and 18th October 2024 at Hotel Pullman, New Delhi. Recognized as Asia's largest platform for Corporate Social Responsibility and Sustainability, the event brought together central and state ministers, industry leaders, academia, and social sector representatives to discuss the role of innovation in driving responsible and inclusive growth.

TECHIN's participation showcased its commitment to promoting sustainable technologies and social entrepreneurship. The team engaged in discussions on emerging ESG trends, impact strategies, and opportunities for collaboration. The summit also provided valuable networking and learning opportunities, supporting TECHIN's goal of aligning innovation with sustainability and climate resilience.

13.8. TECHIN'S LEADERSHIP AT HUDDLE GLOBAL 2024

Mr. Midhu Unnithan, Chief Operating Officer, TECHIN, participated as a speaker and mentor at Huddle Global 2024, organized by Kerala Startup Mission from November 28–30, 2024, in Thiruvananthapuram. He shared insights on sustainable innovation and technology, engaging with startups, innovators, and investors. His sessions highlighted the importance of collaboration and sustainable technological solutions in building a strong and impactful innovation ecosystem.



13.9. TECHIN STARTUPS SHOWCASED AT IPTIF IMPACT DEMO DAY

On 5th December 2024, TECHIN participated in the IPTIF IMPACT Demo Day held at the Saraswati Block, IIT Palakkad. Organized under the IMPACT (Innovation-to-Market Product Acceleration in Cyber Physical Technologies) initiative, the event served as a platform to showcase innovations and technological solutions developed by startups. TECHIN-incubated startups showcased their products and progress, highlighting advancements in WaSH, Medtech and allied technologies. The event enabled these ventures to engage with investors, receive expert feedback, and explore growth opportunities.



13.10 PARTICIPATION IN DISHA HIGHER STUDIES EXPO

IIT Palakkad and TECHIN participated in the Disha Higher Studies Expo held on 6th and 7th December 2024 at Big Bazaar HSS, Palakkad. The expo, a key initiative by the Government of Kerala and organized by the Career Guidance and Adolescent Counseling Cell (CG & AC), is designed to guide higher secondary students and their parents on academic and career opportunities after school.

During the expo, the team from IIT Palakkad and TECHIN shared information on higher education programs at IITs, as well as incubation, innovation, and training initiatives. The participation highlighted opportunities in entrepreneurship and technical skill development, inspiring students to explore careers in science, technology, and innovation.



13.11. TECHIN AT RURAL INDIA BUSINESS CONCLAVE 2024 (RIBC 3.0)

Mr. Midhu Unnithan, Chief Operating Officer, TECHIN, participated as a speaker at the Rural India Business Conclave 2024 (RIBC 3.0), held on 14–15 December at the ICAR - Central Plantation Crops Research Institute, Kasaragod. In his session on “Role of Incubators in Fostering Rural Entrepreneurship – Supports & Programs,” he shared insights on how incubators can support rural startups through mentorship, resources, and scaling opportunities. The event brought together innovators, entrepreneurs, and stakeholders committed to promoting rural entrepreneurship and sustainable development.



13.12. TECHIN AT PANIIT WORLD OF TECHNOLOGY 2025 (PIWOT 2025)

TECHIN, IIT Palakkad Technology IHub Foundation (IPTIF), and IIT Palakkad jointly participated in the PanIIT World of Technology 2025 (PIWOT 2025), held on 17–18 January 2025 at the Jio World Convention Centre, Mumbai. The event was attended by Dr. Dinesh Setti (Faculty-in-Charge, International & Alumni Relations), Mr. Midhu Unnithan (COO, TECHIN), and Dr. Saishyam Narayanan (CEO, IPTIF). Two TECHIN-incubated startups—PritviChakr Innovations and DromoLys R&D—showcased

their innovative solutions, reflecting the strength of the startup ecosystem. Representatives also participated in the Pan IIT Incubator Heads Workshop, contributing to discussions on collaboration among IIT incubators and leveraging the alumni network to promote innovation and entrepreneurship. The event reinforced the role of IITs in advancing India’s leadership in technology and innovation.



13.13. SHOWCASED AT PETRICHOR 25 - IIT PALAKKAD

TECHIN participated in Petrichor 25, the institute's annual techno-cultural festival, held on campus from March 1 to 3, 2025. During the event, TECHIN showcased its innovations and startup ecosystem

to students, faculty, and visitors. This participation highlighted TECHIN's commitment to promoting a strong culture of innovation within IIT Palakkad and the wider community.



13.14. PARTICIPATION AT INCLUSIVE ENTREPRENEURSHIP SUMMIT

TECHIN participated in the Inclusive Entrepreneurship Summit 2025, organized by the Palghat Management Association (PMA) in partnership with the All India Management Association (AIMA). The summit focused on promoting entrepreneurship among women, the

differently-abled, and the LGBTQ+ community. TECHIN highlighted its support for underrepresented groups through mentorship, incubation, and funding opportunities. The event featured keynote speakers and masterclasses on branding, social entrepreneurship, and financial management.



13.15. TECHIN AT HORTI EXPO

TECHIN participated in the India Horti Expo 2025, held from February 7th to 9th at the CODISSIA Trade Fair Complex, Coimbatore. The event showcased the latest innovations in horticulture and brought together industry leaders, researchers, and innovators. Revin Krishi, a TECHIN-incubated

startup, also took part and demonstrated their technology in modern agritech. The expo featured workshops, seminars, and networking opportunities with professionals and policymakers from the horticulture and agriculture sectors.



13.16. INAUGURATION OF NEW OFFICE - TCON UNIFLOW PRIVATE LIMITED

STARTUP INCUBATED AT TECHIN

Inauguration of the newly established office of TCON Uniflow Private Limited, a TECHIN-incubated startup, took place on 8th February 2025. Prof. Santhakumar Mohan, Dean ICSR and Director, TECHIN, inaugurated the office, while Mr. Midhu Unnithan, COO, TECHIN, lit the

ceremonial lamp and delivered a special address. The event marked an important milestone for TCON Uniflow's growth and was attended by industry leaders, entrepreneurs, and stakeholders. TECHIN's involvement highlighted its ongoing support for its startups and technology-driven enterprises.



13.17 STRENGTHENING MEDTECH INNOVATION THROUGH COLLABORATION WITH IMA KERALA

On 27th February 2025, TECHIN partnered with the IMA Kerala State Innovation & Entrepreneurship Committee and the IMA Palakkad Chapter to host a focused discussion on promoting innovation and entrepreneurship in the medical sector. The event brought together key stakeholders including Dr. Joseph Benaven (Chairman, IMA Kerala Innovation Committee), Dr. R. Sathyajith (President, IMA Palakkad), medical professionals, Mr. Rony K. Roy

(KSUM), Prof. A. Seshadri Sekhar (Director, IIT Palakkad), and Mr. Midhu Unnithan (COO, TECHIN). The conversation centered on strengthening the MedTech ecosystem by fostering collaboration between startups, researchers, and healthcare professionals. This initiative aims to accelerate the development of healthcare solutions and support the growth of a vibrant MedTech innovation cluster.



13.18. TECHIN AT IINVENTIV 2025 | IIT MADRAS

TECHIN and the IIT Palakkad Technology IHub Foundation (IPTIF) participated in IInvenTiv 2025, held on February 28 to March 1, at IIT Madras—India's premier R&D fair featuring leading institutions such as IITs, NITs, and IISERs. The teams showcased their work in incubating

startups, promoting entrepreneurship, and enabling academia-industry collaboration. TECHIN-incubated startups, Haricken Process Intensification and Revin Krishi, also exhibited their innovations, highlighting the impactful contributions of early-stage ventures within the IIT Palakkad ecosystem.



13.19. EMPOWERING INNOVATION AT DEKATHON 3.0

Mr. Midhu Unnithan, Chief Operating Officer, TECHIN, facilitated as a speaker at Dekathon 3.0, held from March 5 to 7, 2025, at St. Thomas College of Engineering and Technology, Chengannur. As Kerala's largest Indo-Malaysian hackathon focused on the Sustainable Development Goals (SDGs),

the event brought together young innovators to develop impactful solutions. Mr. Midhu Unnithan shared insights on incubation and innovation, encouraging students to explore entrepreneurship and sustainable technologies.





14 FIELD VISITS TO INCUBATED STARTUPS

As part of its continued commitment to nurturing innovation and ensuring the sustained growth of incubated startups, the Technology Innovation Foundation of IIT Palakkad (TECHIN) undertook a series of field visits to startups operating in the Water, Sanitation, and Hygiene (WaSH)

sector. These visits were aimed at gaining first-hand understanding of operational procedures, assessing progress against project milestones, and identifying areas for further technical and strategic support.

T-CON UNIFLOW PVT. LTD. – PALAKKAD

TECHIN visited T-CON Uniflow Pvt. Ltd. on January 6, 2025, to assess the development and deployment of their Ferrule Device with Flow Control and a Non-Return Valve (FFCV)—an innovative solution aimed at improving household-level water, sanitation infrastructure. The visit included a review of the startup's registered office, assembly area, and testing facility, all of which were found to be well-organized and functional. The FFCV has shown early market traction, with pilot orders received from the Kerala Water Authority and Kannadi Grama Panchayat.

The TECHIN team provided constructive recommendations to enhance clarity and safety at the testing site, including the installation of proper signage on testing rigs. The team also encouraged the startup to pursue product registration on the Government e-Marketplace (GeM) to improve visibility and facilitate public sector procurement opportunities. The visit affirmed the startup's potential to contribute effectively to decentralized sanitation solutions through practical, field-ready innovations.





ENSECT FARM PVT. LTD. – VELLORE

On February 28, 2025, TECHIN conducted a site visit to Ensect Farm Pvt. Ltd., a startup focused on converting organic waste into insect meal and oil. The team inspected the facility's semi-automated production system, which includes hydraulic handling, solar-based drying, and extrusion technology. Operating at a capacity of 500 kilograms

per day, the startup generates daily revenue of approximately ₹60,000. The visit highlighted Ensect Farm's efficient lifecycle management process—from egg hatching to larvae processing—and its potential to contribute meaningfully to alternative protein production and sustainable waste management.



FEMICURA HEALTHTECH PVT. LTD. – CHENNAI

On March 1, 2025, the TECHIN team visited Femicura HealthTech Pvt. Ltd., a startup manufacturing biodegradable maternity pads and baby wet wipes. The visit focused on evaluating the production setup, market strategy, and product innovation. With a dual focus on Business-to-Business (B2B) and Business-to-Consumer (B2C)

channels, Femicura has established a presence on major e-commerce platforms such as Amazon and Flipkart. The startup's naturally scented, eco-friendly baby wet wipes have received positive customer feedback. TECHIN noted the company's structured sales approach and potential for scaling in the sustainable personal care market.



VIOMAX ENVIRO SOLUTIONS PVT. LTD. – CHENNAI

On March 1, 2025, TECHIN visited Viomax Enviro Solutions Pvt. Ltd., a startup developing ozonation-based wastewater treatment systems. The team reviewed the startup's energy-efficient prototype, which treats up to 2 KLD per hour and targets color removal in industrial wastewater. Viomax is currently focusing on customers in Chennai and

Tiruppur and has conducted successful field trials with positive industry feedback. The solution is well-suited for sewage and effluent treatment plant (STP/ETP) manufacturers. The visit highlighted Viomax's innovation and its early traction in the wastewater treatment sector.





15 ENABLING INNOVATION THROUGH CSR

CSR partnerships play a crucial role in accelerating TECHIN's mission of nurturing startups and supporting solutions that address critical societal challenges in sectors such as healthcare, water, sanitation, energy, agriculture and other emerging technologies.

As a Section 8 non-profit company, TECHIN is eligible to receive CSR funding under Schedule VII of the Companies Act, 2013. Here's why partnering with TECHIN is a valuable CSR opportunity:

- Direct alignment with Sustainable Development Goals (SDGs) and national development priorities.
- Proven track record in supporting impactful, innovation-driven startups.

- Transparent fund utilization and measurable social impact.
- Focus on high-impact sectors such as WaSH, MedTech, AgriTech, FoodTech, and more.
- Strong governance and institutional credibility, backed by IIT Palakkad.

CSR contributions will support a wide range of initiatives including incubation, R&D support, field trials, market access, mentorship, and commercialization assistance—driving scalable solutions and inclusive development.

Support us through CSR to shape a better tomorrow.

Email: office@techin-iitpkd.org

Phone: 9400060382, 8848875281





ജലസംരക്ഷണം, മലിനീകരണ നിയന്ത്രണം; സമസ്ത 6.0 ഓൺലൈൻ പിച്ച് ഇവന്റിന് അപേക്ഷിക്കാം

Published by: [Rajesh V](#) [news18-malayalam](#)

Last Updated: July 16, 2024 8:48 PM IST

തിരഞ്ഞെടുക്കുന്ന സംരംഭകർക്കു 20 ലക്ഷം രൂപ വരെ ഫണ്ടിങ് സപ്പോർട്ട് ലഭിക്കും



Follow us on
Google News



ഐ ഐ ടി പാലക്കാടിന്റെ ടെക്നോളജി ഇന്നോവേഷൻ ഫൗണ്ടേഷനും (TECHIN) ഗ്ലോബൽ സാനിറ്റേഷൻ സെന്റർ ഓഫ് എക്സലൻസും (GSCOE) ചേർന്നു സംരംഭകർക്കായി 'സമസ്ത 6.0' ഓൺലൈൻ പിച്ച് ഇവന്റ് സംഘടിപ്പിക്കുന്നു. ജലസംരക്ഷണം, മലിനീകരണ നിയന്ത്രണം & ശുചിത്വം (WaSH) എന്നീ മേഖലകളിൽ നൂതന ആശയങ്ങൾ ഉള്ള സംരംഭകരിൽ നിന്ന് അപേക്ഷിക്കാം.

▶ inati - Sushin Shyam ft. Dabzee - Aave

സമൃദ്ധി 1.0: 10 ലക്ഷം വരെ ഫണ്ടിംഗ്; ഭക്ഷ്യ സാങ്കേതിക വിദ്യാ സംരംഭകർക്ക് അപേക്ഷിക്കാം

Published by: [Sarikka N](#) [news18-malayalam](#)

Last Updated: May 04, 2025 8:36 AM IST

മെയ് 20 വരെ വെബ്സൈറ്റ് വഴി ഓൺലൈനായി അപേക്ഷകൾ സമർപ്പിക്കാവുന്നതാണ്



Follow us on
Google News



ഐ ഐ ടി പാലക്കാടിന്റെ ടെക്നോളജി ഇന്നോവേഷൻ ഫൗണ്ടേഷനും സിമേഗാ ഫുഡ് ഇൻഫ്രാസ്ട്രക്ചർ ലിമിറ്റഡും ചേർന്ന് സംരംഭകർക്കായി 'സമൃദ്ധി 1.0' ഓൺലൈൻ പിച്ച് ഇവന്റ് സംഘടിപ്പിക്കുന്നു. ഭക്ഷ്യ സാങ്കേതിക വിദ്യയിൽ നൂതന ആശയങ്ങൾ ഉള്ള സംരംഭകരിൽ നിന്നാണ് അപേക്ഷകൾ ക്ഷണിക്കുന്നത്. തിരഞ്ഞെടുക്കുന്ന സംരംഭകർക്കു 10 ലക്ഷം രൂപ വരെ ഫണ്ടിംഗ് ലഭിക്കുന്നതായിരിക്കും.

News18

കൂടുതൽ വിശദാംശങ്ങൾക്കും ഓൺലൈൻ

അപേക്ഷ സമർപ്പിക്കാനും വെബ്സൈറ്റ് സന്ദർശിക്കുക: <https://techin-iitpkd.org/samridhi-1-0/>

അപേക്ഷിക്കാനുള്ള അവസാന തീയതി: 20th മെയ് 2025 . ഇമെയിൽ: programs@techin-iitpkd.org ഫോൺ: 8848875281



IIT Palakkad seeks entries for innovative medical tech event

Published - September 04, 2024 08:40 pm IST - PALAKKAD

THE HINDU BUREAU

The Technology Innovation Foundation (TECHIN) of Indian Institute of Technology (IIT) Palakkad, has invited applications for Arogyam 3.0, a pitch event for identifying and nurturing innovations in medical technology.

The event is being organised in partnership with West Pharmaceuticals. The last date to apply is September 15.

Innovators and start-ups in medical technology can apply. The focus will be on creative solutions in artificial intelligence and machine learning in health care, robotics automation in medicine and pharmaceutical advancements.

TECHIN officials said that Arogyam 3.0 would offer participants extensive incubation support, including funding opportunities and flexible incubation options, both online and on-site. Start-ups will benefit from technical and business mentoring, access to co-working spaces, and modern infrastructure.

Additional support includes access to R&D facilities, labs, and testing environments, alongside guidance from mentors within the pan IIT network. Participants will also receive expert advice on legal, financial, and intellectual property matters, along with go-to-market and outreach strategies.

Moreover, the programme will feature specialised workshops and training sessions to drive growth and success. For details, one can visit <https://techn-iitpkd.org/>

Aug 23, 2024

Share   

On Thursday, the Indian Institute of Technology (IIT) Palakkad hosted its inaugural Industry Connect programme in Coimbatore. The event, named the IIT Palakkad Tech Connect, was organised with the assistance of IIT's Sec-8 companies, the IIT Palakkad Technology IHub Foundation (IPTIF), and the Technology Innovation Foundation of IIT Palakkad (TECHIN). Over 100 delegates from 70 industries and associated organisations participated in the programme, which focused on enhancing industry-academia collaboration to drive technological innovation in alignment with the Aatmanirbhar Bharat initiative and the Vision 2047 framework set by the Indian government.

The programme was presided over by IIT Palakkad Director A. Seshadri Sekhar, who outlined the institute's vision for promoting "Design & Manufacture in India." Santhakumar, Dean of Industry Collaboration and Sponsored Research (ICSR), provided an introduction to the institute's faculty, facilities, activities, and potential avenues for collaboration.

Air Commodore Vishnu Gaur, Air Commanding Officer of 5 BRD, Sulur, served as the chief guest. He urged regional industries to collaborate with IIT Palakkad to tackle challenging problems related to technology indigenisation, particularly to reduce dependency on imports in the defence sector.

Other notable speakers included N.P. Naik from Cordite Factory, Aruvankadu; Hemalatha Annamalai, founder of Ampere EV; and Mithun Ramdas, president of the Southern India Engineering Manufacturers Association (SIEMA).

A significant highlight of the event was the signing of an agreement between IIT Palakkad and the Foundries Development Foundation, Coimbatore. This accord aims to foster collaboration in research and technology development, marking a step forward in strengthening ties between academia and industry for mutual growth and innovation.





SAMĀVESH / समावेश - WOMEN ENTREPRENEURSHIP PROGRAM (WEP-1.0)

To foster women-supportive ecosystems by enabling opportunities for women in income-generating roles and community leadership positions through innovative WASH technological solutions



Samāvesh / समावेश - Women Entrepreneurship Program (WEP-1.0) invites women innovators in the Water, Sanitation, and Hygiene (WaSH) domain to pitch innovative solutions at TRL-5 and above. Organized by the Technology Innovation Foundation and the Global Sanitation Center of Excellence at IIT Palakkad, this initiative fosters entrepreneurship, enabling women in leadership and income-generating roles through cutting-edge WaSH technologies. Join WEP 1.0 to showcase your ideas and explore incubation opportunities.

Problem Statements Addressed: Cleaning Technologies for Better Hygiene (W1.01), Improved Menstrual Hygiene Products (W1.02), Smart Toilet Technologies (W1.03), Nature-based Solutions (NbS) for Sewage and Greywater Management (W1.04), IoT Applications in Sanitation (W1.05)

Scope of Work: Conduct a nationwide open-call pitch event, shortlist innovative WASH solutions (TRL 5+), and incubate top startups with grants and mentorship for further development and market readiness.

1. Mentorship by world-class mentors and entrepreneurs
2. Business model canvas development
3. Access to fabrication and rapid prototyping facilities
4. Legal, financial, IP, and business consulting
5. Funding for incubation and go-to-market strategies
6. Networking with NGOs, government agencies, and investors

Winners of Samāvesh WEP-1.0 received grants of up to ₹20 lakhs, along with access to TECHIN's incubation program. This included expert mentoring, business model development, prototyping facilities, legal and financial consulting, and networking with NGOs and government bodies for field testing. Participants also gained funding opportunities and investor connections to scale their innovative WaSH solutions.



BacTreat Environmental Solutions: An innovative decentralized wastewater treatment system based on vertical wetlands.



PriVetChakr: Towards developing an energy-neutral closed-loop system for decentralized resource recovery from source-separated urine.



FemilCura Health Tech: Sustainable hygiene products for women and babies.

Office of the Principal Scientific Adviser to the Government of India



IMPACT ON NATIONAL PRIORITIES: The Samāvesh Women Entrepreneurship Program by IIT Palakkad aligns with India's national missions, such as "Startup India" and "Atmanirbhar Bharat," by fostering women-led innovations in the critical WaSH domain. It supports the UN SDGs by addressing goals like Clean Water and Sanitation (SDG 6), Gender Equality (SDG 5), and Decent Work and Economic Growth (SDG 8). By empowering women innovators with resources, mentorship, and incubation support, the program not only promotes technological advancements but also builds inclusive ecosystems, driving sustainable development and leadership opportunities for women across communities.

Report:

The event was formally launched on 08th March 2024 (International Women's Day) in line with the global theme "Invest in women: Accelerate progress" and was conducted through May 2024. Out of the total of 28 (twenty-eight) start-up innovations applied for the event, 14 (fourteen) startups were shortlisted for the first round of the pitch event and subsequent evaluation was held on 21st and 23rd May 2024. From this, 9 (Nine) applicants were selected for the final pitch event conducted on 28th May 2024.

Out of the nine startups pitched in for the final, the top 3 startups listed below are adjudged as the most promising startups to be incubated at TECHIN under the Sanitech vertical. The official onboarding ceremony of the selected startups was conducted on 11th November 2024 at IIT Alumni Centre in Bengaluru which has provided more visibility and networking opportunities for the startups.

Project outcome at a glance:

> Number of Project Collaborations	= 3
> Technologies Developed	= 3
> Technologies Commercialized/Transferred	= 0
> Jobs Opportunities Created (Direct/Indirect)	= 11
> Number of Women Staff/Engaged	= 4
> Livelihood Supported	= 45
> Startups Supported	= 3
> Internships Offered	= 7
> Training Workshops Conducted	= 2
> Number of Publications	= 1
> Budget consumed to handhold startups	= Rs. 20 Lakhs / Startup
> Total no. of startups – turnaround ratio	= 28: 3

Major Achievements:

- > Top 3 Startups Incubated
- > Selected startups were onboarded under the Sanitech Vertical at TECHIN, gaining visibility and networking opportunities through the IIT Alumni Centre.
- > Focus on Inclusivity
- > Promoted women-led innovation and entrepreneurship in the WASH sector, aligned with SDG 6: Clean Water and Sanitation.
- > Capacity Building
- > Enabled skill development through internships and training workshops, empowering women and contributing to community upliftment.

For more such stories, follow Manthan social media handles:

@ManthanOPSA dailyhunt@ManthanOpPSAtoGo @Manthan O/o PSA

Onboarding event of the startups selected through the Samāvesh cohort



ഐഡിയ പുതിയതാണോ? 20 ലക്ഷം രൂപ വരെ ഫണ്ടിംഗ്; 'സമസ്ത 6.0' ഓൺലൈൻ പിച്ച് ഇവന്റിലേക്ക് അപേക്ഷ ക്ഷണിച്ചു

Janam Web Desk · Jul 17, 2024, 04:27 pm IST



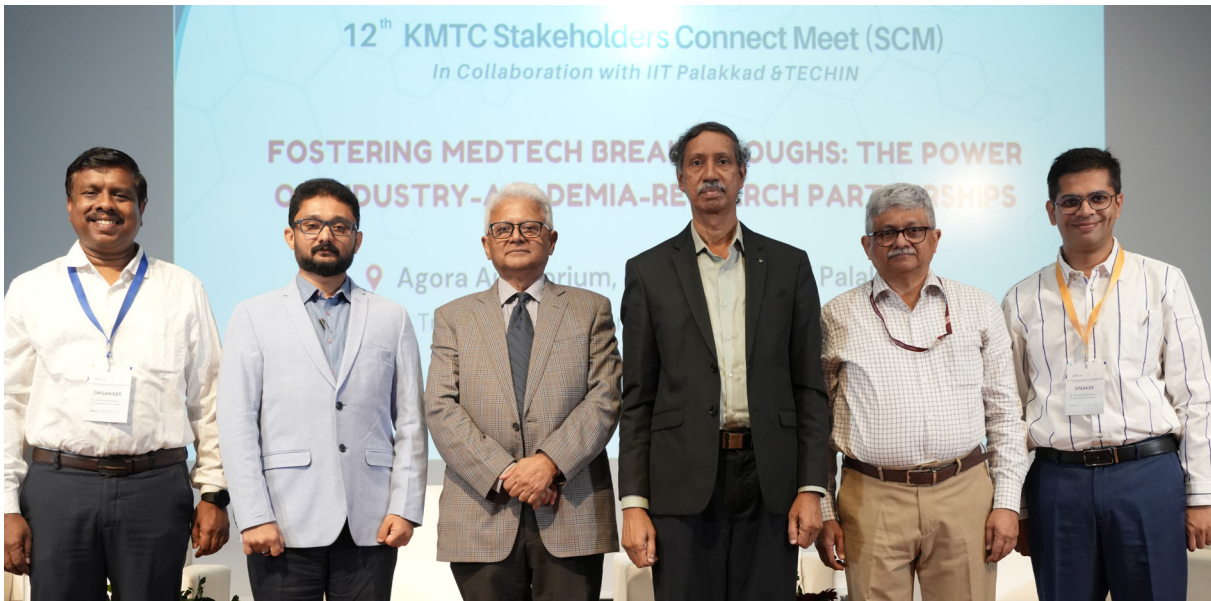
ഐഐടി പാലക്കാടിന്റെ ടെക്നോളജി ഇണക്കാവേഷൻ ഫൗണ്ടേഷനും (TECHIN), ഗ്ലോബൽ സാന്നിദ്ധ്യങ്ങൾ സെന്റർ ഓഫ് എക്സലൻസ് (GSCOE) ചേർന്ന് സംഘടിപ്പിക്കുന്ന "സമസ്ത 6.0" ഓൺലൈൻ പിച്ച് ഇവന്റ് സംഘടിപ്പിക്കുന്നു. ജലസംരക്ഷണം, മലിനീകരണ നിയന്ത്രണം, ശുചിത്വം (WaSH) എന്നീ മേഖലകളിൽ നൂതന ആശയങ്ങൾ ഉള്ള സംരംഭകർക്ക് അപേക്ഷകൾ സമർപ്പിക്കാം.

തിരഞ്ഞെടുക്കുന്ന സംരംഭകർക്ക് 20 ലക്ഷം രൂപ വരെ ഫണ്ടിംഗ് സഹായം ലഭിക്കുന്നതായിരിക്കും. ഓഗസ്റ്റ് 15 ആണ് അപേക്ഷ സമർപ്പിക്കാനുള്ള അവസാന തീയതി. കൂടുതൽ വിവരങ്ങൾക്കും ഓൺലൈൻ അപേക്ഷ സമർപ്പിക്കാനും വെബ്സൈറ്റ് സന്ദർശിക്കുക: <https://techin-iitpkd.org/samastha-6-0>
Ph: 8848875281



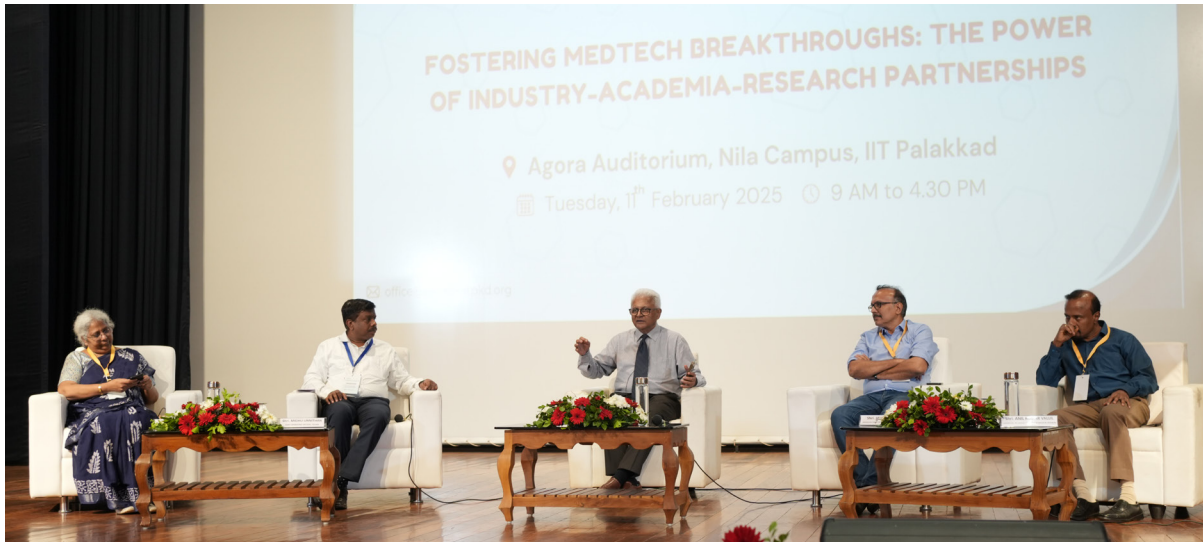


17 GALLERY



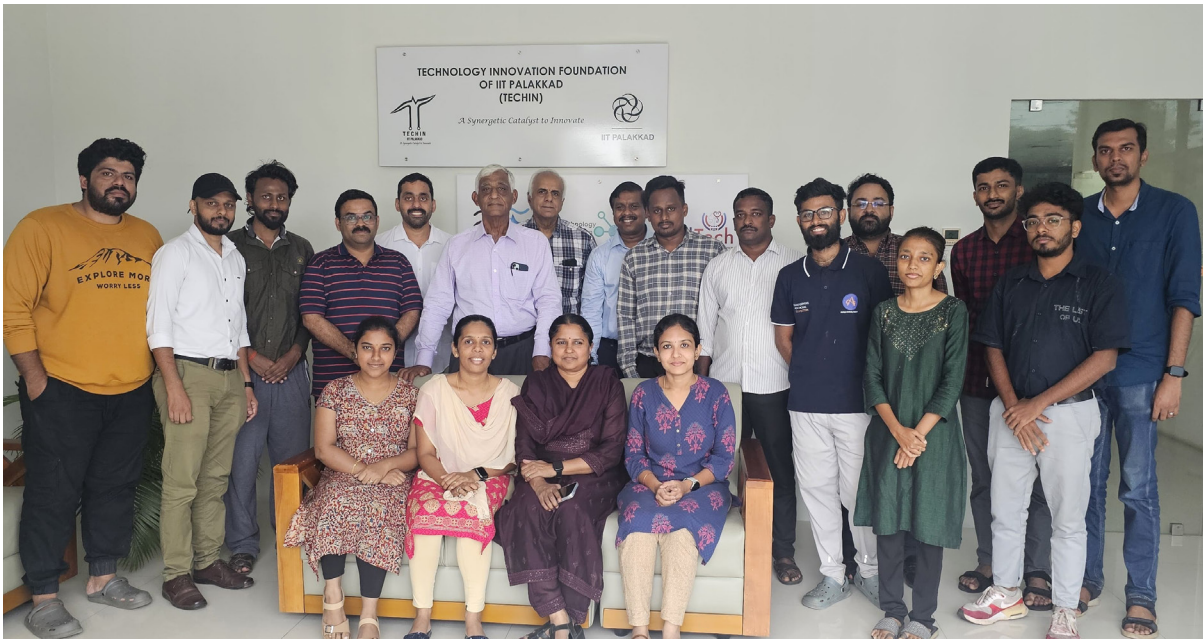
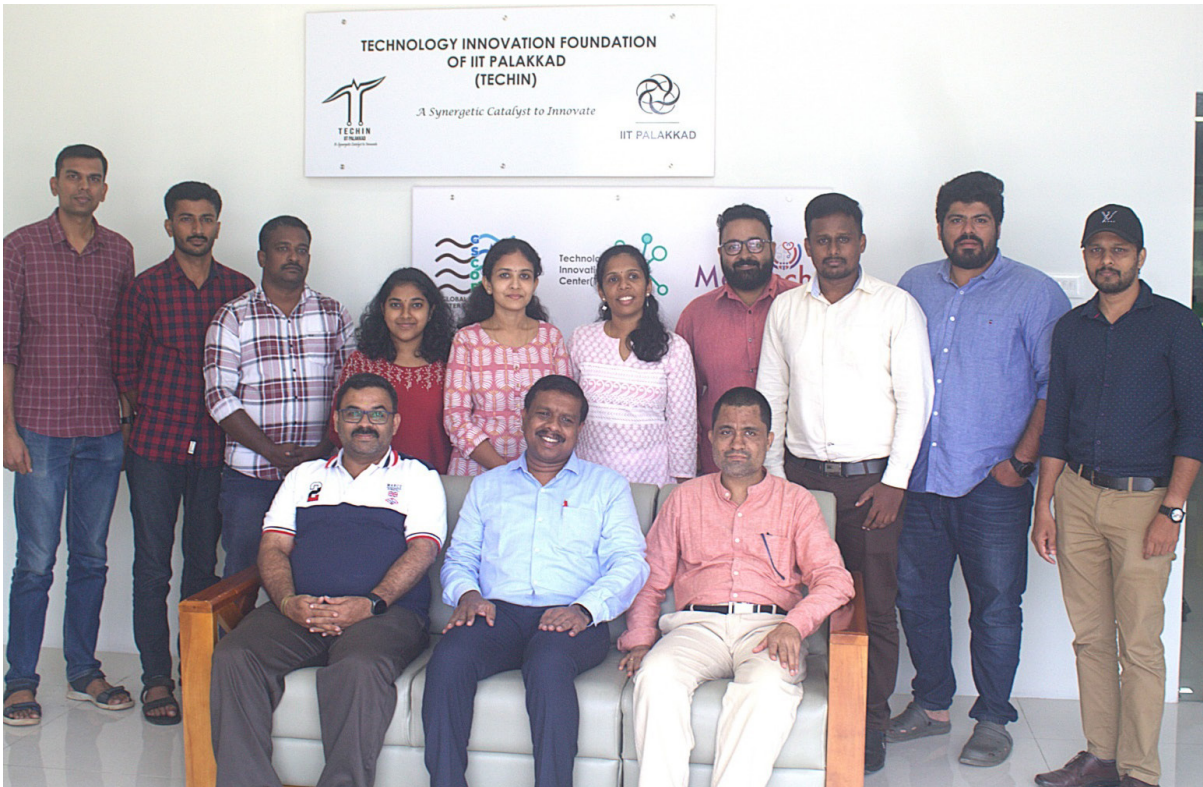














Technology Innovation Foundation of IIT Palakkad(TECHIN)

Regd. Office: 31, Kanjikkode West, Nila Campus, Palakkad, Kerala -678 623

Email: office@techin-iitpkd.org | programs@techin-iitpkd.org

Phone: +91 94000 60382 | 88488 75281

