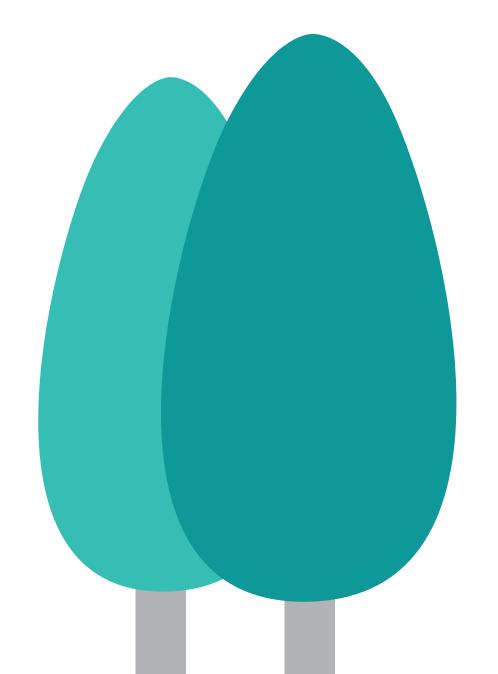


# Ideas Intersections Impact

Bringing Unlike
Minds Together to
Build For Tomorrow



Annual Report 2024– 25

In 2024, we brought unlike minds together engineers & entrepreneurs, researchers & risk-takers, designers & developers and sparked innovation that scaled. 2025 holds even bigger intersections to co-create value.

### **Table of Contents**

| 01        | Introduction                         |  |  |  |  |  |
|-----------|--------------------------------------|--|--|--|--|--|
| 03        | IITMRP: At A Glance                  |  |  |  |  |  |
| 04        | Message from Our Chairman            |  |  |  |  |  |
| 05        | Message from Our Group CEO           |  |  |  |  |  |
| 06        | Message from Our Professor-in-Charge |  |  |  |  |  |
| 07        | Board of Directors                   |  |  |  |  |  |
| 09        | IITM Incubation Cell                 |  |  |  |  |  |
| 15        | Centres of Excellence                |  |  |  |  |  |
| <b>17</b> | Ecosystem Enablers                   |  |  |  |  |  |
| 19        | R&D Clients                          |  |  |  |  |  |
| 23        | Year In Review                       |  |  |  |  |  |
|           | 23 Business Operations               |  |  |  |  |  |
|           | 25 Research Collaboration            |  |  |  |  |  |
|           | 26 Infrastructure                    |  |  |  |  |  |
|           | 27 Human Resources                   |  |  |  |  |  |
|           | 28 Community Engagement              |  |  |  |  |  |
|           | 29 Energy & Sustainability           |  |  |  |  |  |
|           | 31 Assistive Technology              |  |  |  |  |  |
| 34        | Events & Partnerships                |  |  |  |  |  |
| 38        | In the News                          |  |  |  |  |  |





As India's first university-based Research Park, we have always believed in the power of collaboration. Every day, research-driven companies, startups, academic pioneers, and students come together to explore new ideas, develop transformative technologies, and reimagine what's possible.

Our mission — to bring unlike minds together — is more relevant today than ever. With 1.2 million sq. ft. of co-innovation space, thoughtfully designed networking hubs, and a model that integrates academia and industry seamlessly, we are creating an environment where research doesn't just stay on paper but powers real-world solutions.

Together with IIT Madras, our industry partners and our vibrant startup ecosystem, we are reducing innovation cycles, accelerating go-to-market strategies, and unlocking the full potential of Indian innovation.

As we look ahead, we do so with renewed confidence in our model — one that delivers impact at scale while staying true to our purpose: To transform ideas into innovations that shape a smarter, greener, and more inclusive future.

This is India's engine for deep-tech innovation.

This is IIT Madras Research Park.

### At a Glance

### **Enabling Innovation Through Collaboration**



million sq.ft.
of Collaborative

Workspace



11.2 acre Campus



250+

Research-focused Organisations & Labs



**17**+





6000+

Technologists co-creating value

### Message from Our Chairman



As Chairman of the Board of Directors,
I am honoured to envision IITM Research Park
as a global vanguard of collaborative
innovation. Our Startup Shatam mission,
a bold commitment to ignite entrepreneurial
ecosystems, has sparked a surge of
deep-tech innovation, uniting visionaries to
address humanity's grand challenges.
Rooted in IIT Madras's 60-year legacy of
excellence, we are shaping a future where
India leads the knowledge economy, aligned
with Viksit Bharat 2047.

The Board encourages inter-disciplinary ecosystems that transcend traditional boundaries, fostering collaboration among academia, industry, and entrepreneurs. We advocate for strategic partnerships, bold risk-taking and a steadfast focus on societal progress, ensuring innovation drives both economic and human advancement.

Looking forward, I call on stakeholders to co-create a world where creativity and purpose converge. Our ambition is to position IITM Research Park among the top-50 global innovation hubs by 2030, setting benchmarks for excellence and inclusivity.

Together, let us build a legacy of impact, where every idea sparks progress and every partnership amplifies possibility.

With resolve and optimism,

**Prof. V. Kamakoti**Chairman, Board of Directors
IITM Research Park

### Message from Our Group CEO



Natarajan Malupillai

As I reflect on the past year at the IIT Madras Research Park (IITMRP), I am filled with pride and gratitude. This is a shining example of a bold vision backed by grit and several years of hard work to bridge academia and industry to create a thriving innovation ecosystem. IITMRP is a Section–8 company facilitating translational research and commercialisation for industry clients and startups. Promoted by IIT Madras and governed by an independent board comprising eminent industry & government leaders.

IITMRP houses 180+ clients – large Indian companies, multinationals, medium enterprises, Centers of Excellence, and startups – unified by their passion for research, collaboration with IITM faculty & researchers to bring innovation to market. IITM Incubation

Cell - a premier Deep-Tech incubator in the country – kicked into higher gear incubating 104 startups, with a total of 458 startups.

We applaud the launch of regional research parks across the country, and we are committed to partnering with other institutions to accelerate and amplify impact.

One of the most rewarding takeaways has been the surge in the culture of **research**, **innovation**, **and entrepreneurship** amongst students which bodes well as we march towards Viksit Bharat@2047.

#### Looking ahead, our priorities are clear:

- Be a catalyst for Indian companies to invest in R&D with focus on market outcomes
- Increase impact of IITMRP beyond the geography of the campus and explore satellite models to strengthen Industry-Academia -Startup linkage
- Actively support deep-tech entrepreneurship to solve for India's challenges, and enabling them to scale up to be global players.

To all our partners—academic, corporate, entrepreneurial, and civic—I thank you for your unwavering belief in our mission. I would also like to thank both the Government of India, and the Tamil Nadu government who steadfastly guide and support us in our journey.

As we step into another year, we remain committed to shaping not just the future of innovation, but the future of India through innovation.

Warm regards,

Natarajan Malupillai

Group CEO, IITM Research Park,
Incubation Cell, Rural Technology
Business Incubator

### Professor-in-Charge



Professor Radhakrishna G Pillai

I am a Professor in the Department of Civil Engineering at IIT Madras. In September 2024, I took the additional responsibility of Professor-in-charge of IITMRP. Since then, I have interacted with various clients at IITMRP. These interactions have given me insights into how the like-minds and unlike-minds are working together at the IITMRP ecosystem and achieving great success. Let me congratulate all the stakeholders at IITMRP for collaborating at the forefront of research and delivering meaningful output in various sectors.

IITMRP commits to identify and facilitate innovations and inter-disciplinary collaborations in various sectors. For example, this year, we engaged nearly 100 additional faculty members in client projects and

launched two new Centres of Excellence in Road Safety and Quantum Technology. Also, IITMRP continues to undertake projects of its own in the areas of Assistive Technology for differently-abled individuals and Sustainable Energy for reducing our carbon footprint.

Efforts are on the way to promote research and commercialisation in sectors that are relatively less-represented, not very appealing even, but definitely needed to accelerate the overall growth of the nation. We want to promote a culture of taking laboratory research to field implementation & commercialisation in a big way in various parts of the country. In this regard, IITMRP is also sharing its experiences and guiding other universities and government agencies in setting up research parks in their premises with a focus on their relevant and local economies.

Connecting the various stakeholders such as researchers at IIT Madras and industry, entrepreneurs and their supporters, and government officials and, more importantly, ensuring fruitful collaborations is not a simple task; it is truly a Herculean task. On this, I thank the entire staff at the Corporate Office of IITMRP for their sincere efforts towards facilitating a world-class ecosystem. In the future, we will work harder to identify the research needs of various sectors and be at the forefront of taking academic research to field implementation in large scale.

With warm regards,

Prof. Radhakrishna G. Pillai

Professor-in-Charge,

IITM Research Park

Professor, Department of

Civil Engineering, IIT Madras

### Board of Directors



Prof. V. Kamakoti Director, IIT Madras Chairman of Board of Directors, IITM Research Park



Natarajan Malupillai Group CEO, IITM Research Park, Incubation Cell, Rural Technology Business Incubator



Prof. Radhakrishna G. Pillai Professor-In-charge, - IITM Research Park, Professor - Department of Civil Engineering, IIT Madras



**Kris Gopalakrishnan**Co-founder,
Infosys



M.M. Murugappan
Chairman,
Carborundum Universal Ltd
(CUMI)



B. Santhanam
Managing Director,
Grindwell Norton
Limited

### Board of Directors



Gopal Srinivasan Chairman and Managing Director, TVS Capital Funds



**Prof. Manu Santhanam** Dean, IC&SR, IIT Madras



S. Mahalingam
Former Chief Financial
Officer (CFO) &
Executive Director ,
Tata Consultancy Services



Brajendra Navnit, IAS
Principal Secretary to
Government,
Information Technology &
Digital Services Department,
Government of Tamil Nadu



V Arun Roy, IAS
Secretary to Government,
Industries, Investment Promotion
& Commerce Department,
Government of Tamil Nadu



P. Amudha, IAS
Additional Chief Secretary
to Government,
Revenue and Disaster
Management Department,
Government of Tamil Nadu

### The National Model for Nurturing Deep-Tech Entrepreneurship

As India's leading deep-tech startup incubator, IITM Incubation Cell (IITMIC) plays a pivotal role in transforming cutting-edge research into high-impact ventures. With an 80% success rate, IITMIC nurtures self-sustaining startups that solve critical challenges across sectors from climate and health to mobility and defense through globally scalable innovation.













458 Startups incubated



190 Startups in the market



**02**Successful
Unicorns



**01**IPO of an IITMIC incubated Startup



₹**50,000 C**I (US \$6 Billion) Valuation



↑ ₹12,000 Cr (US \$1.4 Billion) of Investments





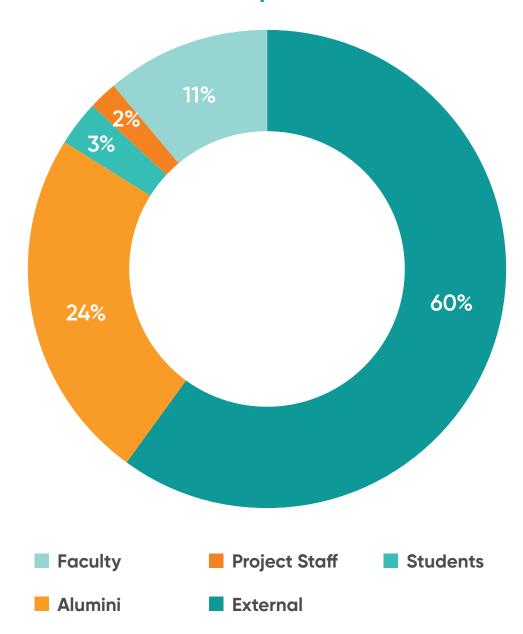
700+ Patents filed



Startup incubated every 3 days

<sup>\*</sup>Figures as of 31st March 2025

### **900 Startup Founders**



117 companies have IIT faculty as founders or minority shareholders

The strength of the startup ecosystem lies in its diversity of thought and origin – bringing together faculty, alumni, students, and external innovators to co-create breakthrough solutions.

This blend of academic insight and entrepreneurial drive fuels a vibrant, innovation-led economy.

## Startup Shatam Catalysing India's Product Nation Vision

In a landmark accomplishment, IITMIC incubated **104** deep-tech startups in FY 2024-25 averaging **one every three days.** Launched by IIT Madras, Director Prof. V. Kamakoti, the Startup Shatam mission was envisioned to transform India into a "Product Nation" and "Startup Nation" by accelerating the translation of research into impactful, scalable solutions.

This initiative directly advances the national vision of Viksit Bharat 2047, positioning IITMIC at the forefront of enabling technological self-reliance and global leadership in innovation.



### START UP

### **SUCCESS STORIES**



Born out of IIT Madras, Xyma Analytics is a deep-tech innovation company dedicated to revolutionising real-time monitoring in sectors such as oil & gas, power, and heavy industries with their cutting-edge ultrasonic waveguide sensors. Their flagship product line, TMAP™, offers cutting-edge, non-intrusive sensors for high-temperature and high-pressure environments, enabling predictive maintenance and operational efficiency.

#### Type:

**Deep-Tech Startup** in ultrasonic waveguide sensors

#### Year Incubated:

2019

### **Technical Guidance:**

Prof. Krishnan Balasubramanian & Prof. Prabhu Rajagopal,

Centre for Non Destructive Evaluation (CNDE), IIT Madras





#### **Highlights**

- I Sensor deployed in the ROG (Refinery Off Gas) Cracker unit at Reliance Industries Limited, Jamnagar validating the robustness and precision of their technology in demanding industrial settings.
- I Received a Letter of Award from the Emirates Global Aluminium demonstrating international recognition of their advanced sensor technology and paving the way for expanded global impact in industria digitalisation and smart manufacturing.



The IIT Madras Research Park ecosystem has been instrumental in XYMA Analytics' journey of growth and innovation. The access to world-class academic experts from IIT Madras, coupled with direct interaction with seasoned industrial professionals, has significantly accelerated our R&D and product development cycles.

### START UP

### **SUCCESS STORIES**



Mindgrove designs System-on-Chips (SoCs) around the Digital India RISC V Shakti Processor core, targeting signal processing and edge vision applications. Their flagship product, Secure IoT, is India's first indigenously designed microcontroller chip for high-performance, cost-effective embedded and smart device applications.

#### Type:

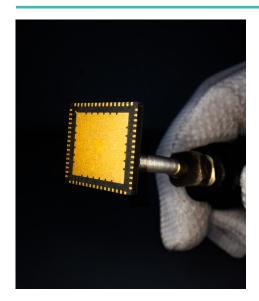
Deep-Tech Startup in Fabless
Semiconductors

#### **Year Incubated:**

2021

#### **Technical Guidance:**

**Prof. Gopalakrishnan Srinivasan,**Department of Computer Science and Engineering, IIT Madras





#### **Highlights**

- I \$10.3 Million Cumulative fund raised (\$2.3 Million in seed funding + \$8 Million in Series A funding)
- I Secured a Design Linked Incentive (DLI) government project grant under MeitY to develop their second chip Vision SoC

#### **Tapping into the IITMRP Ecosystem:**

- Access to world-class infrastructure and lab facilities critical for chip design and prototyping.
- Networking and peer support through IITM Pravartak Technologies Foundation and the broader startup ecosystem at IITMRP.

### START UP SUCCESS STORIES



NeoMotion aspires to transform the lives of people with disabilities and the elderly by empowering them with high-quality, personalised mobility devices. Their flagship products, NeoFly (a customisable wheelchair) and NeoBolt (a motor-powered add-on), offer affordable, empowering solutions that promote independence and inclusion for wheelchair users across India.

#### Type:

Deep-Tech Startup in Assistive Technology – Mobility Devices

#### Year Incubated:

2016

#### **Technical Guidance:**

**Prof. Sujatha Srinivasan,** Head, TTK Center for Rehabilitation Research and Device Development (R2D2), IIT Madras







#### **Highlights**

- I Winner of the Zero Project Award at the United Nations, Vienna for "Livelihood on Wheels" impacting 500+ persons with disabilities.
- 1,500+ beneficiaries supported in 2024-25 through 50+ CSR partners.
- I Enabled over 5,000 people with disabilities to move independently across India.
- I Interaction with Hon'ble Prime Minister at the Viksit Bharat Summit (Jan 2025).
- I Launched NeoStand, India's most customisable electric standing wheelchair, developed in collaboration with IIT Madras' TTK Center for Rehabilitation Research and Device Development (R2D2).

#### Tapping into the IITMRP Ecosystem:

- Access to R&D infrastructure, testbeds, and easy financing pilots with SBI Bank.
- Strategic funding and project support via IITMIC and CSR partners notably Indian Oil Corporation, Vivriti Capital.

### **Centres of Excellence: Accelerating Innovation**

The Centres of Excellence at IIT Madras Research Park are strategic enablers of deep-tech innovation designed to catalyse industry-academia partnerships, accelerate research translation, and empower startups with advanced infrastructure and expertise.

These sector-specific hubs drive breakthrough solutions in sustainability, healthcare, mobility, and beyond, reinforcing IITMRP's mission to shape India's global leadership in technology and entrepreneurship.

Through shared labs, collaborative R&D, and an active innovation pipeline, these CoEs are transforming academic insight into real-world impact, strengthening India's innovation economy.





Center of Excellence in **Advanced Automotive** Research



Centre of Battery Engineering and Electric Vehicles



Center for Excellence in **Energy & Telecommunications** 



Centre of Excellence in Wireless Technology



Centre for Railway Research



Centre for Urbanization, **Buildings & Environment** 









**Innovation Centre** Collaborate · Innovate · Impact



International Centre for Clean Water



India Centre for Lab Grown Diamond



Kotak - IIT Madras Save Energy Mission



Centre of Excellence in Road Safety







### **CASE STUDY**

### India Centre for Lab Grown Diamond



**Year of Establishment:** 

2023

**Key Areas of Focus:** 

Research on Lab
Grown Diamond growth
and applications

InCent LGD is India's pioneering hub for cutting-edge research, innovation, and skill development in lab grown diamonds, driving sustainable growth in the gem and tech industries.



#### **Highlights**

- I India's first indigenously developed patentable scaled prototype of HPHT lab grown diamond machine has successfully achieved pressures of the order of 7 GPa and temperatures of 1400 °C.
- I India's first indigenous, novel, patentable, MPCVD chamber design, is being developed based on extensive multi-physics simulations, and tested for Hydrogen Plasma Creation.
- I Foundations are laid for India's first LGD seed certification established via a unique inside diamond marking system.
- I Hosted VAIRAM, a workshop dedicated to exploring the advancements, challenges, and potential of the lab grown diamond sector in India.

### **Catalysts of Innovation and Scale**

At IIT Madras Research Park, ecosystem enablers are more than supporters. They are strategic partners powering the innovation lifecycle. From early-stage funding and mentorship to market access and business validation, they play a pivotal role in accelerating startup growth and amplifying the impact of deep-tech solutions.



**Establishment in:** 

**Entry into IITM Research Park:** 

2007

2018

The Chennai Angels (TCA) is an angel investment network in Chennai, India, with a focus on supporting early-stage startups. Over 120+ active individual, institutional and corporate angel investors are associated with TCA providing both funding and mentoring to help entrepreneurs build and grow their ventures. TCA has invested over INR 150 Cr across 80+ start ups.

TCA participated in Pitch Perfect (funding-focused event), VC In-house mentoring session curated specially for The Chennai Angels (TCA) and the BOEING BUILD 4.0 Boot Camp.

TCA looks forward to investing and continuing engagement with startups across sectors including Drones, SpaceTech, AgriTech, Sustainability, ClimateTech, Manufacturing and Healthcare.

### Mentored & Invested in 24–25:









**Establishment in:** 

2021

**Entry into IITM Research Park:** 

2023

A Deep-Tech Venture Capital Firm focusing on startups that will fundamentally transform industries and economies through a strong scientific and research foundation. Their portfolio includes companies in areas like Water, Industry 4.0, BioTech, Computing, and B2B SaaS.

- 18+ Companies 350 Cr + Target AUM (INR) 09+ Team Members 80Y+ Collective Experience
- First close of 8X Ventures' India-focused deep-tech fund at INR 200 Cr
- Hosted the 8X Ventures Annual Investors Meet, featuring tours of IITMRP and IITMIC
- Launched India's first private Deep-Tech Hub with a target to mobilise \$100 Million
- Participated in a ₹22 Cr Series A round for TIEA Connectors to boost India's ESDM sector

Mentored & Invested in 24-25:

INVESTED
SOLINAS





for its seamless access to high-potential startups, deep-tech talent, and a collaborative ecosystem that bridges academia and industry, creating a fertile ground for innovation, early validation, and scalable investment opportunities.

### **R&D CLIENTS**

## Bridging Industry and Academia

At IITMRP, industry-academia collaboration is fostered through a dynamic ecosystem that integrates IIT Madras faculty expertise, industry professionals, and state-of-the-art infrastructure to drive innovation. Companies set up R&D centers, leveraging the proprietary Credit Point System to ensure active collaboration by engaging in activities like joint research projects, student engagement and technology development with IITM's Centres of Excellence, Incubators and Startups.



4700
Collaborations



1000+

Research Projects among RP clients, startups and IITM Faculty



300+
IITM Faculty have engaged with clients on projects



1300+

IITM students hired as interns/ employees by clients



1200+

Employee enrollments for courses/MS/MTech/ PhD at IITM



₹300 Cr

in value, 741,000 Credit Points accrued



₹387 Cr Value of IITM Centre of Excellence projects carried out



₹40 Cr

Revenue earned by our incubated Startups on these Innovation projects



### Saint-Gobain Research India





**Primary Sectors:** 

### Construction, Mobility, Industry

Saint-Gobain Research India (SGR India) is one of the 8 cross-functional R&D centers for the Saint-Gobain Group that started its operations in 2012.

The center supports Saint-Gobain's existing businesses and creation of new businesses, enabling the Group to accelerate its growth and create customised products & services for its customers in India and other regions.

IITMRP offers catalytic location, people, and mindset to innovate across academia and startup. We have had projects from inception to test, TRL1 to TRL7 through IITMRP ecosystem. Be it an idea generation, a consultancy, a student recruitment, product testing, and validation or to connect and collaborate, IITMRP stands at the forefront for Saint-Gobain.

### **Basic Sciences to Business**

Established in 2012

Employee Strength 260+

Product Launches Filed 225+

Patents Filed 225+

Patents Grants 90+

### Key projects facilitated through IITMRP



### **Biomass & Briquette**

The collaboration enabled the Gyproc team to establish biomass as an alternative to fossil fuel by biomass characterisation, densification and combustion studies at lab scale.

### Impact:

A preliminary LCA calculation marked ~89% reduction in the carbon footprint for plasterboard production and usage in production facilities as an alternative fuel.

#### **Water Filtration**

Evaluated performance of Silicon Carbide-based ceramic membranes for domestic sewage wastewater applications. Quality of permeate found on par with polymeric UF membranes with improved water yield.

### Impact:

Studies indicated ~95% turbidity removal with 90-95% water yield and high flux of 350 LMH with SG ceramic membrane product ready-to-go in the Indian market.

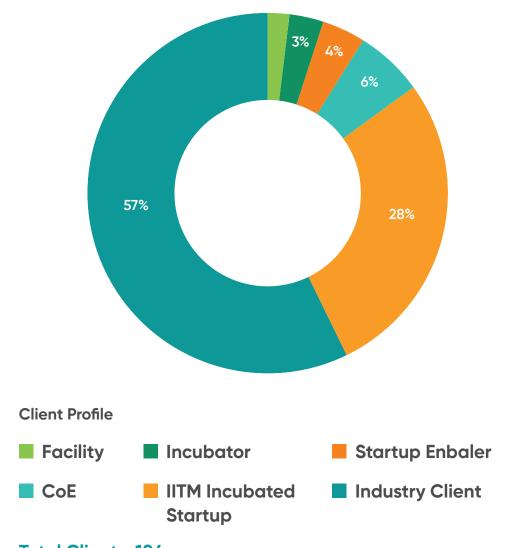


### **Business Operations**

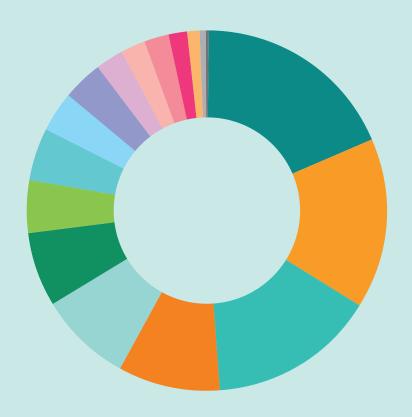
### **Occupancy Report: FY25**

IITMRP's sales occupancy performance reflects our proactive approach to maximizing space utilisation and fostering strategic partnerships. By leveraging market insights and tailored leasing strategies, we have enhanced occupancy rates, driving revenue growth and reinforcing our competitive edge in the sector, while at the same time staying true to our ethos of building a collaborative ecosystem.

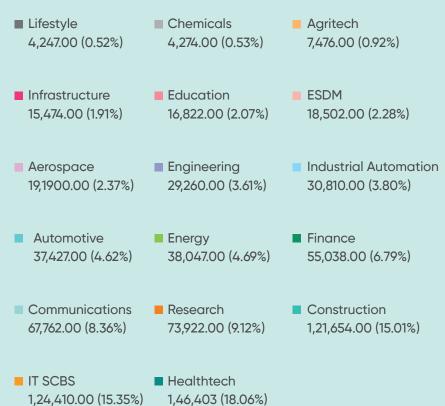
97% Occupancy - 32 New Clients



**Total Clients: 184** 



### Industry and Startup Clients - Area Occupied - By Sector



### Research Collaboration

Ideas become impactful only when faculty, students and industry professionals interact in meaningful ways to create value.

### IITMRP's primary objectives are:

- R&D to Commercialisation through Industry-Academia Interactions
- Innovation through Startups
- Nurturing and Growing Talent

The Research Collaboration Team (RCT) at IITMRP is responsible for enabling all the above and assisting Industry Clients with achieving their overall research objectives. Collaboration is measured with a proprietary Credit Point System across 30 different metrics.

RCT team also leads our internal efforts to become a process-driven organisation enabling higher productivity and efficacy. To this extent, there are ongoing efforts to bring the teams within IITMRP into a CRM that helps us deliver value seamlessly and efficiently. Phase 1 was successfully completed in FY25 and more collaboration and automation tools are being implemented to bring all our processes within the platform.

### **Highlights**

133K Credit Points achieved by R&D Clients (against the FY25 obligation of 85K Points) 156% over the target

₹23Cr monetary value of engagements with IIT Madras

1000+ IITM Students and Research Scholars visited the Research Park

Over ₹8 Cr revenue to startups from our R&D clients Over 60 startups have been engaged by Clients on innovation projects

200+ new connections were established between Clients, Faculty and Startups

### Infrastructure

At IITMRP, we continue to invest in infrastructure to support our mission of fostering research, innovation, and entrepreneurship. Our robust physical and digital infrastructure is designed to provide seamless, reliable, and sustainable services to R&D units, startups, centres of excellence, and the broader ecosystem.

### **Highlights**

HVAC: Installed a new 300TR Carrier chiller with cooling towers and pumps, replacing aging units for enhanced energy efficiency. Fresh Air Systems revamped to improve environmental quality.

Multi Level Car Park (MLCP)
Upliftment project completed for better user experience and safety.

RP Office Renovation
Renovated and
expanded the RP office,
bringing all teams under
one roof for improved
collaboration and
efficiency.

### **Human Resources**

60 professionals | 10 departments | 55% of departmental leadership held by women

FY25 marked significant strides in strengthening our HR foundation to support a growing, future ready organisation.

- A comprehensive HR policy framework, aligning with legal standards and the organization's strategic & operational needs was rolled out.
- As part of our digital transformation efforts, implemented Zoho People to centralise employee data management and streamline backend HR operations.
- Launched Zoho Performance Management System (PMS) to lay the groundwork for metrics-driven a performance tracking framework across the organisation.



### **Community Engagement**





Education is a powerful equaliser — an investment in individuals and the collective future of our communities. At IITMRP, our CSR efforts reflect a deep commitment to nurturing young minds and enabling inclusive growth. This year, we implemented targeted infrastructure upgrades in two local government schools, impacting over 2,200 students from underserved communities. By enhancing classrooms, integrating digital tools, and improving hygiene facilities, we are creating safer, future–ready learning environments that foster long–term educational success.

#### **Beneficiaries**

Chennai Higher Secondary School, Taramani Total Students: 1,423 (797 boys, 636 girls) Chennai Primary School, Taramani Total Students: 783 (LKG to 5th grade)



We also supported the Cancer Institute (WIA), a renowned public charitable institution, by funding two advanced tissue Embedders, machines vital for accurate cancer diagnosis and treatment for its Oncopathology Department. By strengthening this critical step in the diagnostic pipeline, our support contributes directly to improving cancer care outcomes for underserved communities.

#### Impact:

- 15,00,000 Tissue sample diagnosis in the next 10 years
- · 2 lakh projected beneficiaries

### **Energy & Sustainability**

### Accelerating the Path to 100% Renewable Energy

At IIT Madras Research Park, sustainability is a foundational principle driving how we operate, innovate, and grow. This year, we made measurable progress toward our long-term vision of becoming a 100% renewable energy-powered campus, while reinforcing our commitment to national energy priorities and global climate goals.

Through a combination of large-scale deployments, intelligent energy systems, and deep collaboration with startups, academia, and government, we are demonstrating how innovation campuses can lead India's energy transition.



11,713 metric tons of CO2 Reduced due to Renewable Energy



**Energy Profile** 

Grid 30.5%

Diesel 0.5%

■ Wheeled in Solar 27.3%

■ Wind 36.5%

Rooftop Solar 5.3%



23 GWh
Total energy
consumed by
IITMRP



70%
Increased energy cost savings



Li-ion Battery

1 MWh



Thermal Storage
Hot Water Cold Water
18 kWh 2.5 MWh



Phase Change With Hydrates **55 kWh** 



Rooftop Solar

1 MW



Wheeled-in Solar

4 MW



Wind 2 MW

### **Key Milestones in 2024-25**

- Commissioned an additional 2 MW solar power plant with trackers, doubling our solar share from 15% to 30%.
- Launched India's First 1MWh Stationary Battery Storage on Campus.
- Installed an 18kWh hot water storage system that captures waste heat from chillers for use in the cafeteria cutting down reliance on conventional heating and demonstrating scalable thermal efficiency.
- EMS: Developed a one-stop platform to get instantaneous energy consumption, savings and
  operational data. Our EMS platform now facilitates real-time control of energy systems, including
  storage and thermal units supporting peak shaving, tariff optimisation, and integration of
  renewables for improved usage.



### **Industry & Government**

- Policy Impact: Contributed to NITI Aayog's handbook on RE-powered charging infra for heavy-duty vehicles in collaboration with Centre of Excellence for Zero Emission Trucking (CoEZET).
- International Climate Conference: Collaboration between Sri Lanka and IITMRP on Sri Lankan Decarbonisation Strategies.
- TN State Planning Commission along with UNDP & IITMRP: Joint assessment on feasibility of District Cooling System in Chennai city.

### Strategic Engagements & Thought Leadership

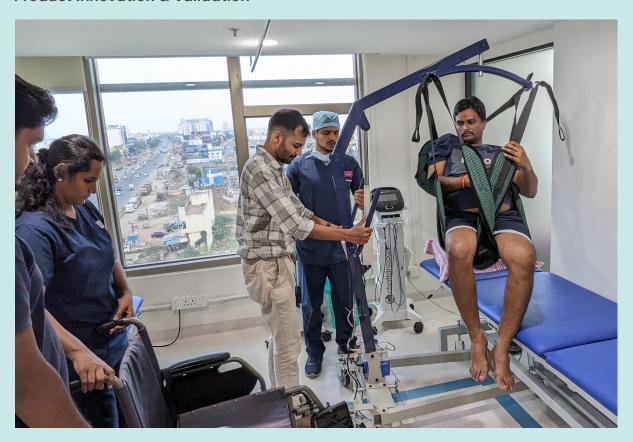
- **EnVision 2025** The 3<sup>rd</sup> edition of India's first energy festival convened 700+ thought leaders, policymakers, and innovators under the theme "Ground Zero for Net Zero".
- Grid of the Future Workshop (India Australia) explored the future of transnational energy grids
  via the One Sun One World One Grid (OSOWOG) initiative. This brought together prominent
  stakeholders such as MNRE, PGCIL, CTUL, Grid India along with Indian & International Over
  and Underwater Cable Manufacturers (NKT, Sterlite Power, etc.).
- Collaborations with Global Partners Including ITU (Denmark), Sri Lanka Climate Office, and Energy Systems Catapult (UK).

### **Assistive Technology**

India faces a persistent gap in accessible, affordable assistive technologies. The Assistive Technology (AT) initiative is a strategic pillar of our commitment to building affordable, accessible solutions for persons with disabilities and the elderly. In 2024–25, our focus was on scaling indigenous solutions, deepening global partnerships, and accelerating startups working at the intersection of empathy and engineering.

16+ AT-focused startups already supported and an expanding ecosystem of cross-border collaborators.

#### **Product Innovation & Validation**



Smart Hoist Transfer Aid validated at Kauvery Hospital and JH Rehabilitation Center — a foldable, user friendly solution for physically transferring wheelchair users and bedridden individuals. Following the positive validation, customised models for diverse care environments are being developed.

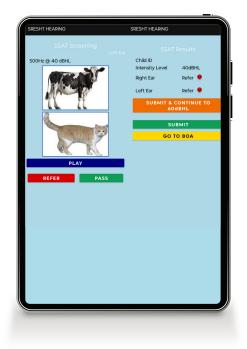
#### Select a Vision Test





Eye Screening App (in partnership with Sankara Nethralaya) — a mobile vision screening tool tailored for early detection of refractory error of eyes, especially in underserved rural regions. This was designed for use in school health programs and rural clinics.

Hearing Screening App (with Sri Ramachandra Institute) — available in multiple Indian languages for greater accessibility. This is now being commercialised by startup SRESHT. The tool empowers schools, community health camps, and primary health centers to conduct rapid and reliable hearing assessments to identify hearing loss early and initiate timely referrals, minimising long term complications.





GO Karna Learning Device (Working prototype) – a multisensory educational tool for visually impaired students, integrating tactile and audio features designed for classrooms, special education centers, and home use. The device is poised for a broader rollout in the coming academic year.

#### **Global Collaborations**

Partnership with Technische Universität Dresden (TU Dresden), Germany: An intensive workshop was organised to kickstart this strategic partnership, providing startups from both countries with a platform to exchange ideas, form partnerships, and identify project opportunities. Focus areas include artificial intelligence, sensor technology, digital health, robotics, lightweight construction, and 3D printing.

**Partnerships with Impact:** Collaborated with Karna Vidya Foundation and Maxellarator Foundation to co-develop the Go Karna Reading Device and encourage AT entrepreneurship focused on vision

**Visibility & Thought Leadership:** Featured at EMPOWER 2024 hosted by NISH, Kerala showcasing 8+ indigenous AT innovations including the Magnetic Braille Pad, Smart Glove, and Dyslexia Screening Tool. These AT innovations attracted significant attention from policymakers, rehab professionals, NGOs, and researchers.



## **EnVision 2025: Ground Zero for Net Zero**



### 750+ attendees

### 50+ expert speakers

### 14+ critical energy themes

IIT Madras Research Park, in partnership with the Ministry of New and Renewable Energy (MNRE) and India Energy Storage Alliance (IESA), hosted the third edition of EnVision India's First Energy Festival, This year's theme, Ground Zero for Net Zero, reflected our mission to accelerate this momentum by bringing together Industry, Academia, Startups & Government to address urgent challenges and opportunities in transitioning to clean energy.



Sonam Wangchuk, renowned innovator and climate activist speaks at EnVision 2025

### **EVENTS & PARTNERSHIPS**



#### 1MWh Lithium Ion Battery Storage Unveiling

IITM Research Park launched a first-of-its-kind large-scale 1MWh lithium ion battery storage system raising the campus' renewable energy share to 90%. Inaugurated by the Governor of New Mexico, this landmark battery launch helped position our campus as a national model for green energy integration and storage innovation.

### Workshop on Renewable Energy Integration and the Future of the Grid

Jointly organised by the IIT Madras Research Park and **Power Grid Corporation of India Limited** (PGCIL), the workshop convened leading public and private stakeholders to explore the future of India's power grid and cross border RE transmission. The event reinforced IITMRP's commitment to enabling strategic academia-industry-government alignment for large-scale energy transformation.



Workshop on Future of the Grid

### 13<sup>th</sup> CavinKare MMA Chinnikrishnan Innovation Awards (2024)

The event was held at IITM Research Park, celebrating hidden entrepreneurial talents that address real-world challenges through innovation.

By hosting this prestigious celebration of grassroots innovation, IITMRP amplified entrepreneurial solutions tackling urgent social and environmental issues furthering our mission to foster purpose-driven innovation that scales.

### **EVENTS & PARTNERSHIPS**

### Lift-off: Hosted by IITMRP for AgniKul

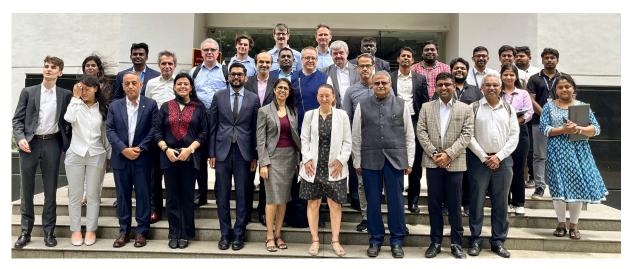


On May 30th, AgniKul Cosmos made history with Agnibaan SOrTeD, featuring the world's first single-piece 3D-printed semi-cryogenic engine built at IITMRP's Rocket Factory 1. "Lift-off," hosted by IITMRP for the Agnikul team, families, and friends celebrated this inspiring milestone born from innovation and collaboration.



### **EVENTS & PARTNERSHIPS**

### French Business Circle in Chennai - R&D Panel Session



The French Business Circle and IITMRP hosted an exchange session for French companies on leveraging Tamil Nadu's innovation ecosystem, in the presence of the Consul General of France in Pondicherry & Chennai, Ms. Lise Talbot. Member companies shared success stories and explored opportunities in deep-tech and talent, highlighting IITMRP's vital role in fostering R&D partnerships and French innovation in Chennai.

### VentureClash, Connecticut Innovations's international pitch showcase



VentureClash, organised by IITMRP in collaboration with the US Consulate brought together over 100 ecosystem leaders, students, and industry experts as five high-growth companies took the stage to pitch their innovation in front a prestigious panel of industry leaders, top VCs, and key ecosystem players, including former PepsiCo CEO Indra Nooyi. The objective was to enable a collaborative platform that empowers Indian entrepreneurs, accelerates growth, and create pathways for international expansion.

#### IN THE NEWS



### Prof. Radhakrishna G. Pillai Named Fellow of AMPP, USA

Prof. Radhakrishna G. Pillai,
Professor-in-Charge at IITMRP and
Professor of Civil Engineering at IIT Madras,
was named a Fellow of the Association for
Materials Protection and Performance (AMPP)
at their 2025 Annual Awards in Nashville,
which recognises leaders shaping the future
of materials protection.



### Recognised as a SIRO by DSIR, Government of India (2022 - 2025)

IITMRP has been officially recognised as a Scientific and Industrial Research Organisation (SIRO) by the Department of Scientific and Industrial Research (DSIR), Government of India, for the period 2022 to 2025. This recognition opens new avenues to deepen our R&D capabilities and enhance our role as a catalyst for industry-academia collaboration.



### IITMRP Group CEO speaks at Umagine TN 2025

As a leading voice in India's innovation ecosystem, IIT Madras Research Park reaffirmed its commitment to shaping the future of academia-industry collaboration at Umagine TN 2025. Nat Malupillai, Group CEO of IITMRP, delivered a keynote at Umagine 2025 on 'Building Impactful Innovation from Academia.' His insights spotlighted IITMRP's vision for enabling purpose-driven ventures anchored in sectoral opportunities, rapid prototyping, and long-term impact over short-term gains.

•• IIT Madras Research Park is undoubtedly the finest research facility attached to any institute in India - it is a global achievement. This model must be replicated across the country.

### - S. Krishnan,

Secretary, Ministry of Electronics & IT (MeitY) at the Sanghamitra, Rotary District 3234 Conference, 2025.



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