



DELHI TECHNOLOGICAL UNIVERSITY

Department of Applied Physics

Report on the Field/Exposure visit to Foundation for Innovation and Technology Transfer (FITT)

Date: 29th May 2025

Venue: Foundation for Innovation and Technology Transfer (FITT), IIT Delhi

Organised By: Delhi Technological University (DTU)

Organising Team:

- **Convener:** Prof. Vinod Singh
- **Coordinator:** Dr. Renuka Bokolia

Mode: Offline

Number of Attendees: 40

The Department of Applied Physics at Delhi Technological University (DTU), in collaboration with the Institution's Innovation Council (IIC) and Viksit Bharat Abhiyan, successfully conducted a Field visit to Foundation for Innovation and Technology Transfer (FITT). The objective of the *Field/Exposure Visit* is to provide students with firsthand exposure to the innovative and entrepreneurial ecosystem at the Foundation for Innovation and Technology Transfer (FITT), IIT Delhi.

Event Objective

The primary objective of the *Field/Exposure Visit* is to provide students with firsthand exposure to the innovative and entrepreneurial ecosystem at the Foundation for Innovation and Technology Transfer (FITT), IIT Delhi. This visit aims to bridge the gap between academic knowledge and practical implementation by introducing students to:

- **Design Centers at FITT:** Where academia and industry converge to drive technological innovation.
- **Makerspaces:** Collaborative environments that foster creativity and enable the transformation of innovative ideas into prototypes.
- **Fab Labs:** Advanced facilities offering state-of-the-art tools for digital fabrication and rapid prototyping.
- **Live Demonstrations and Workshops:** To provide experiential learning through practical exposure.
- **Ecosystem Awareness:** Helping students understand the infrastructure supporting startups and technological advancements.

Key Highlights of the Visit

Understanding technology and research of different startups under FITT

- **Papli Labs** is an AI-driven geospatial data company focused on enhancing urban mobility, safety, and operational efficiency through dynamic, real-time road intelligence solutions. Its core mission is to bridge the gap between static maps and real-world road conditions by delivering hyper-local, time-sensitive insights to businesses, city planners, and commuters. Papli Labs uses AI and dashcam data to provide real-time, hyper-local road intelligence. It captures city footage using 4G dashcams, then processes the data with AI to identify road features like traffic, waterlogging, and construction. Users access this visual data through an interactive map with filters for location and time, plus export options. Their platform supports urban planning, logistics, advertising, and media with actionable road insights.
- **Trishul Space** is an Indian aerospace startup founded in 2024. The company's primary objective is to revolutionize rocket propulsion technology by developing high-performance, cost-effective, and reliable liquid rocket engines to support the growing demands of the global space industry. Trishul Space's business model includes direct sales of propulsion systems, offering testing services, and establishing long-term contracts with launch vehicle manufacturers. By providing lightweight, cost-effective, and scalable propulsion systems, the company empowers both emerging startups and established players in the space sector to focus on other mission-critical aspects of their operations. Through these initiatives, Trishul Space is poised to play a pivotal role in the advancement of aerospace technology, contributing to the development of an indigenous and reliable space ecosystem in India.
- **Dash Dynamic** is an Indian deep-tech startup focused on revolutionizing electric vehicle (EV) charging through wireless technology. Founded in 2020, Dash Dynamic aims to simplify and accelerate EV charging by eliminating the need for physical cables. Their mission is to enable EV users to charge their vehicles by simply parking over a ground-based wireless charger, thereby enhancing convenience and reducing charging times. Their technology reportedly charges vehicles 30% faster than conventional plug-in chargers. Dash Dynamic's wireless charging system operates through electromagnetic induction. A transmitter coil embedded in the ground generates an alternating magnetic field, which induces an electric current in a receiver coil installed in the vehicle. This current is then converted into usable power to charge the vehicle's battery. The company offers a mobile application that allows users to locate compatible charging spots, monitor charging sessions, and manage payments.
- **Altair** is a global technology company known for providing software and cloud solutions in the areas of simulation, high-performance computing (HPC), and artificial intelligence (AI). Altair's core motive is to help organizations across various industries design and optimize products, processes, and decision-making through simulation, data analytics, and AI. Altair works by providing advanced software and cloud-based solutions for simulation, high-performance computing (HPC), and artificial intelligence (AI). It enables engineers and designers to optimize products through simulation-driven design using tools like HyperWorks and Inspire. Altair also offers powerful platforms for data analytics and machine learning to support smart decision-making. Its HPC solutions help

run large-scale simulations efficiently, while IoT capabilities enable real-time monitoring and digital twins. Together, these tools help industries innovate faster, reduce costs, and improve product performance.

- **Cluix** is a deep-tech cleantech startup based in New Delhi, India, established in 2021. The company's primary mission is to innovate and deploy affordable, disruptive clean technology solutions that are accessible to all, aiming to foster a sustainable future through technological advancements. Cluix operates by developing innovative, affordable clean-tech solutions, with a focus on water quality monitoring. Its flagship product is a hand-held, IoT-enabled analyzer that tests eight key drinking water parameters in compliance with IS 10500 standards. The device integrates with the Jal Jeevan Mission's Water Quality Monitoring & Surveillance system for real-time data transmission. Cluix collaborates with government agencies, research bodies, and other stakeholders to deploy its technology across sectors. Recognized by the Jal Jeevan Mission Innovation Challenge and incubated at IIT Delhi's FITT, Cluix is also a registered vendor with the Quality Council of India and listed on the Government e-Marketplace (GEM) portal.

Visit shots





New Delhi, Delhi, India
G5vq+84h, Block E, Katwaria Sarai, New Delhi,
Delhi 110016, India
Lat 28.543411° Long 77.187902°
29/05/2025 12:28 PM GMT +05:30



New Delhi, Delhi, India
G5vq+84h, Block E, Katwaria Sarai, New Delhi,
Delhi 110016, India
Lat 28.543395° Long 77.187983°
29/05/2025 12:51 PM GMT +05:30



TRISHUL SPACE



DASH DYNAMIC





ALTAIR



CLUIX



Participants Engagement

The event attracted 40 enthusiastic participants, including students (from Master's physics, Bachelor's, and B.Tech), 2 Faculty members, and PhD scholars. Participants raised insightful questions about the technology and research of different startup programs, leading to valuable interactions.

Event Outcomes

The Field/Exposure Visit to FITT provided students with valuable insights into the startup ecosystem and real-world applications of science and technology. They explored innovative ventures like Papli Labs (AI-driven road data), Trishul Space (rocket propulsion), Dash Dynamic (wireless EV charging), Altair (simulation and AI solutions), and Cluix (IoT-based water testing). Through live demonstrations and interaction with startup teams. The experience enhanced their understanding of entrepreneurship, government-supported tech incubation, and the role of deep-tech in sustainable development.

Conclusion

The field visit to FITT, IIT Delhi, proved to be an enriching experience that broadened the students' perspectives on innovation, research commercialization, and entrepreneurship. It also highlighted the importance of institutional support in transforming academic research into viable technologies and startups.

The DTU organizing team, led by Prof. Vinod Singh and Dr. Renuka Bokolia, ensured the smooth execution of the visit and meaningful engagement for all participants. The experience is expected to inspire students to actively participate in innovation and entrepreneurship-driven initiatives.

Acknowledgments

We would like to extend our sincere gratitude to:

- Delhi Technological University for its continuous support and resources.

- Prof. Vinod Singh, Dr. Renuka Bokolia for their constant support and guidance in organizing the event successfully.
- All participants for their presence in making this event a success.
The visit served as a stepping stone for students and researchers to think beyond academic research and explore opportunities in real-world innovation and commercialization. We look forward to organizing more successful events like this in the future.

Prepared by:

Date of Report: 29th May 2025