



NEWSLETTER

OCTOBER 2025

MANIPUR TECHNOLOGY INNOVATION HUB

INNOVATION DIALOGUE WITH DR. MANI MADHUKAR, PROGRAM LEAD, INNOVATION CENTER FOR EDUCATION, IBM 3TH OCTOBER 2025

The Innovation Dialogue with **Dr. Mani Madhukar** was jointly organized by the **Manipur Technology Innovation Hub (MTI-HUB)** and **NIELIT Imphal** on Friday, 3 October 2025, at the MTI-HUB Conference Hall, IT Park, Mantripukhri, Imphal.

The session began with a welcome address by Dr. Rajiv Kangabam, Lead, MTI-HUB, who highlighted the importance of industry-academia collaboration in strengthening Manipur's startup ecosystem. Dr. Mani Madhukar, Program Lead at IBM's Innovation Center for Education, then shared global best practices and emerging technology opportunities with local entrepreneurs.



During the discussion, participants shared challenges related to access to advanced technology, mentorship, funding, and markets. Dr. Madhukar introduced IBM's platforms in AI, Cloud, Blockchain, and IoT, along with mentorship and collaboration programs that support rapid prototyping and global scaling. He encouraged startups to leverage IBM's innovation networks to overcome regional limitations and accelerate growth.

The dialogue witnessed participation from 28 startup founders and co-founders from Manipur, including 5 women entrepreneurs, reflecting the growing inclusivity of the state's startup ecosystem. The audience comprised energetic youth innovators keen on building impactful and scalable ventures, highlighting the vibrant and youth-led nature of Manipur's entrepreneurial landscape.

The session enabled participants to gain clarity on innovation strategies, emerging technologies, and practical approaches to converting ideas into scalable solutions. It enhanced awareness of future skills, strengthened confidence to tackle startup challenges, and motivated founders to collaborate in building a sustainable and technology-driven innovation ecosystem in Manipur.



OUTREACH TRAINING PROGRAM ON INTELLECTUAL PROPERTY RIGHT THURSDAY, 16TH OCTOBER, 2025

The DPIIT IPR Chair at the National Law University & Judicial Academy (NLUJA), Assam, in collaboration with the Manipur Technology Innovation Hub (MTI-HUB) and supported by the Manipur Science and Technology Council (MASTEC), Government of Manipur, organized an Outreach Training Program on Intellectual Property Rights (IPR) on 16th October 2025 at the Manipur IT Park, Mantripukhri, Imphal.

The event aimed to enhance awareness and provide hands-on knowledge on the significance, procedures, and applications of Intellectual Property Rights for innovators, students, researchers, technical professionals, entrepreneurs, startups, and MSMEs. As IPR literacy remains limited in many parts of India – including the northeastern region – the program sought to build a foundation for stronger innovation and commercialization culture.



SESSION 1: GENERAL OVERVIEW OF INTELLECTUAL PROPERTY RIGHTS

SPEAKER: DR. PANKAJ KUMAR, DPIIT IPR CHAIR PROFESSOR, NLUJA ASSAM

The inaugural technical session provided a comprehensive introduction to the core concepts of Intellectual Property Rights, covering the purpose and global relevance of IPR systems. Dr. Kumar elaborated on how IP protection encourages innovation, promotes fair competition, and drives socio-economic and technological development.

- **Key points discussed included:**
- Definitions, types, and classifications of IPR such as Patents, Copyrights, Trademarks, Industrial Designs, GI, Trade Secrets, and Plant Variety Protection.
- How IPR transforms inventions and ideas into legally protected commercial assets.
- Importance of IP for startups, MSMEs, and R&D institutions in improving valuation, investment opportunities, manufacturing rights, and export competitiveness.
- Global and national frameworks regulating IPR, including WIPO, TRIPS Agreement, and Indian IPR policies.
- The growing innovation landscape in India and the need for increased patent filings from the North East region.

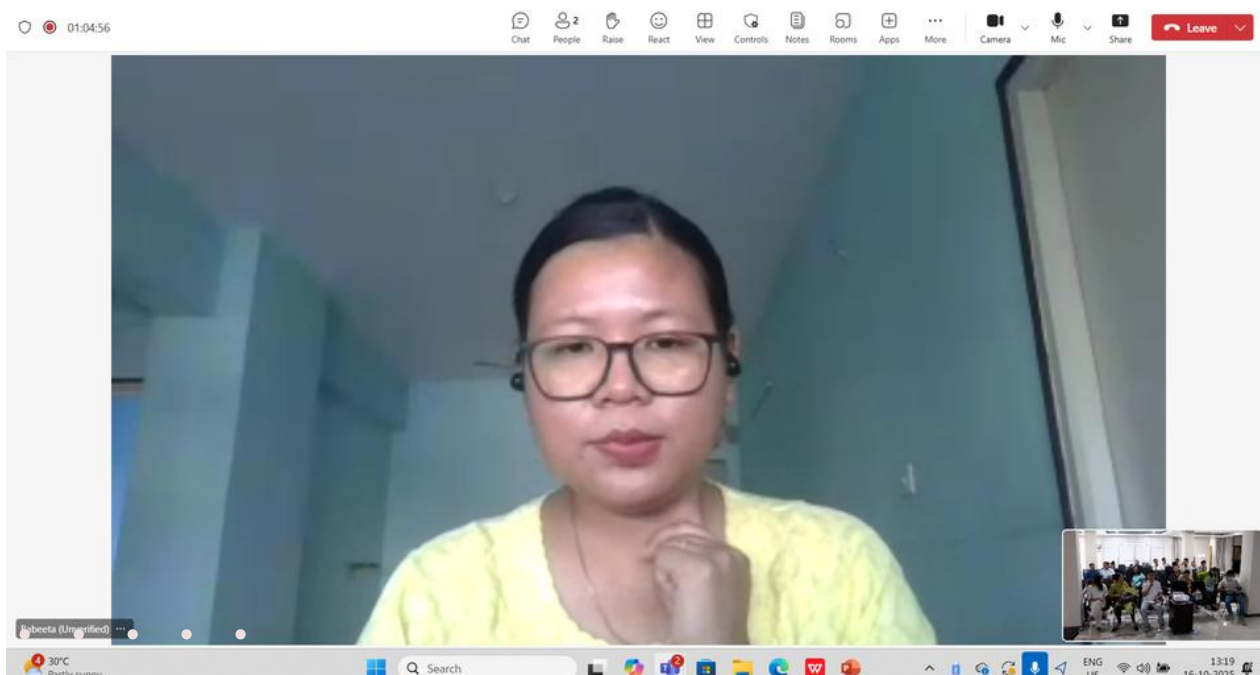


SESSION 2: PATENTABILITY AND NON-PATENTABILITY

SPEAKER: DR. SHAMJETSHABAM BABEETA CHANU, EXAMINER OF PATENTS & DESIGNS, INDIAN PATENT OFFICE, KOLKATA

This session offered a detailed explanation of the legal and technical criteria for patent protection in India. Dr. Babeeta discussed the evaluation process used by patent authorities and highlighted the three fundamental requirements for examining a patent application:

- Novelty / Newness
- Inventive Step / Non-Obviousness
- Industrial Application / Utility
- **Key highlights included:**
 - Meaning of prior art and significance of prior-art search.
 - Explanation of subject matter that is not patentable under Section 3 & 4 of the Indian Patent Act — including natural principles, mathematical formulas, software per se, traditional knowledge, radioactive inventions, living organisms, artistic creations, and methods of agriculture and medical treatment.
 - Real examples of failed and successful patent cases to help participants understand evaluation and rejection causes.
 - Importance of confidentiality and Non-Disclosure Agreements before public disclosure of research.



SESSION 3: OVERVIEW ON INDUSTRIAL DESIGNS, TRADEMARKS & GEOGRAPHICAL INDICATIONS (GI)

SPEAKER: MS. YANGLEM CHANU CAROLIN, RESEARCH SCHOLAR & TEACHING ASSISTANT, DEPARTMENT OF LAW, MANIPUR UNIVERSITY

This session focused on the legal mechanisms available for protecting aesthetic and brand-related intellectual property. Ms. Carolin explained the significance of:

- Industrial Designs — protecting unique shapes, patterns, ornamentation, color combinations applied to articles (e.g., handicrafts, consumer products, furniture, apparel).
- Trademarks — protecting logos, words, symbols, names, or any sign used to identify and differentiate goods or services.
- Geographical Indications (GI) — safeguarding products originating from specific geographical locations with unique qualities.
- She highlighted potential GI opportunities in Manipur and the importance of community-driven validation, such as:
- **Chak-Hao, Kachai Lemon, Tamenglong Orange, Hathei Chilli (Sirarakhong Chilli)**



SPECIAL ADDRESS :

SPEAKER: MR. PRITAM SINGH, SCIENTIFIC OFFICER, MANIPUR SCIENCE AND TECHNOLOGY COUNCIL (MASTEC), GOVERNMENT OF MANIPUR

He spoke about the Government's initiatives and schemes on IPR promotion, startup and innovation support, R&D funding, and capacity building programs across the state. He emphasized the need for academia-industry partnerships and urged youth to convert ideas into intellectual assets.



SESSION 4: TECHNOLOGY TRANSFER, INNOVATION MANAGEMENT & GOVERNMENT FUNDING

SPEAKER: MR. LONGJAM ROBINSON SINGH, MANAGER – BUSINESS DEVELOPMENT, MTI-HUB

The session focused on bridging innovation and commercialization through technology transfer models, IP management, and industry partnerships, while highlighting the role of incubators and government schemes in supporting startups. Success stories from MTI-HUB further inspired participants to pursue innovation-driven entrepreneurship.



The program witnessed the active participation of around 50 participants, including 18 female and 32 male attendees. The participant group represented a diverse ecosystem consisting of university students, researchers, academicians, entrepreneurs, and institutional representatives. Notably, around 20 startups from different sectors such as food processing, healthcare, biotechnology, agriculture, digital technology, renewable energy, and handicrafts actively participated in the program, reflecting the growing innovation culture in Manipur.

The program concluded with appreciation remarks from the resource persons, who commended MTI-HUB for organizing a comprehensive and enriching initiative.



ONE DAY WORKSHOP ON ARTIFICIAL INTELLIGENCE AND ITS INDUSTRIAL APPLICATIONS

BRIDGING THE GAP BETWEEN ACADEMIA AND INDUSTRY
28TH OCTOBER 2025

A one-day workshop titled “**Artificial Intelligence and its Industrial Applications: Bridging the Gap Between Academia and Industry**” was organized by Manipur Technology Innovation Hub on 28th October 2025 at MTI-HUB, IT Park, Mantripukhri, Imphal.

The workshop aimed to create a collaborative platform for academicians, researchers, industry professionals and aspiring entrepreneurs to understand the multidimensional role of AI in driving innovation, research and sustainable industrial growth. The program brought together a distinguished group of speakers representing the academic, industrial and entrepreneurial sectors. Each speaker shared valuable insights into their respective domains, offering participants a holistic understanding of how AI is reshaping both research and real-world applications.

SPECIAL ADDRESS

The workshop was graced by **Mr. Th. Tangkeshore, Guest Faculty and Retired Senior Assistant Professor, Manipur University**, as Special Guest, who was felicitated for his contributions and guidance. In his address, he emphasized active participation in technology-driven programs, especially in AI, and encouraged participants to leverage platforms like MTI-HUB for continuous learning and industry readiness.



SESSION HIGHLIGHTS

OVERVIEW OF MANIPUR TECHNOLOGY INNOVATION HUB

The program commenced with an introductory address and an organizational overview delivered by **Ms. Velloree Khuraijam, Technical Associate, MTI-HUB**. In her presentation, Ms. Velloree provided a comprehensive overview of the Manipur Technology Innovation Hub, its vision and its ongoing initiatives to promote innovation, research and entrepreneurship in the region.



ARTIFICIAL INTELLIGENCE: UNDERSTANDING BASICS, ONGOING RESEARCH, CHALLENGES AND THE FUTURE SCOPE

Dr. Romesh Laishram, Associate Professor, Department of Electronics and Communication, Manipur Institute of Technology, delivered an enlightening session on "Artificial Intelligence: Understanding Basics, Ongoing Research, Challenges and the Future Scope."

He began by defining Artificial Intelligence and discussing its history and major types, followed by a comparison between AI and human intelligence, highlighting AI's strengths in large-scale data processing and accuracy, while humans excel in creativity and emotional reasoning. He also elaborated on key AI domains such as Machine Learning, Natural Language Processing, Computer Vision, and Fuzzy Logic, providing participants with a strong conceptual foundation.

Looking ahead, Dr. Romesh outlined emerging areas including Explainable and Ethical AI, Human-centric AI, Edge AI and TinyML, AI for scientific discovery, Quantum-assisted AI, and Creative and Generative AI. He stressed the importance of strengthening institutional collaboration, sharing datasets, and exposing students to real-world AI challenges to transform academic research into practical, industry-ready innovations.



AI IN INDUSTRY – APPLICATIONS, OPPORTUNITIES AND THE ROAD AHEAD

The second session offered an industry perspective on Artificial Intelligence, where **Shri Ailan Maibam, Founder & Director, Lamzing Technologies Pvt. Ltd.** highlighted the real-world adoption of AI and its transformative impact across sectors. He explained how technologies such as machine learning, computer vision, and predictive analytics are reshaping traditional industries by enhancing decision-making, reducing operational costs, and improving productivity.

He shared practical use cases, including AI-powered pizza quality inspection systems that automatically assess toppings, shape, and baking consistency on production lines, as well as wheat height detection systems for monitoring crop growth and agricultural productivity.

Mr. Ailan also presented a case study on AI-based plant disease detection, discussing both its advantages and limitations, noting that while the technology enables accurate diagnosis, its economic impact on farmers can be limited due to detection often occurring after visible crop damage, leading to higher investment and lower returns.



CASE STUDY ANALYSIS – STARTUP JOURNEY

The final session featured an inspiring entrepreneurial case study by **Mr. Mahesh Thokchom, Founder & Director, SolveXgiga Technologies** titled **"From Concept to Impact: A Startup's Journey in Artificial Intelligence."**

He shared insights into conceptualizing and validating an AI-based startup idea, overcoming challenges in product development and scaling, navigating funding and team building, and translating advanced technology into impactful business solutions.

He further highlighted SolveXgiga Technologies' pioneering work in agricultural intelligence through AI-based plant disease detection, precision farming using hyperspectral imaging for soil monitoring and crop planning, and upcoming data annotation services aimed at supporting AI development while creating new employment opportunities in the sector.



The workshop concluded with a strong message – that meaningful innovation in AI requires synergy between academic research, industrial application, and entrepreneurial initiative. The collective insights from the resource persons reinforced the importance of skill development, interdisciplinary collaboration, and sustained engagement between stakeholders in the AI ecosystem.



45 DAYS INCUBATION TRAINING PROGRAM (IDEA STAGE) 2.0

MODULE 12: FINANCIAL PLANNING BASICS

THURSDAY, 9TH OCTOBER 2025

As part of the 45 Days Incubation Training Program (Idea Stage) 2.0, a theory session on the topic “**Financial Planning Basics**” was conducted on 9th October, 2025 at MTI-HUB. The session was led by Shri Laishram Birdas, CS, Manipur State Power Distribution Company Limited.

This module introduced participants to financial planning fundamentals, including cost estimation, revenue forecasting, break-even analysis, and basic financial statements.

The session enhanced financial literacy and helped startups understand the importance of financial discipline.



45 DAYS INCUBATION TRAINING PROGRAM (IDEA STAGE) 2.0

MODULE 12: FINANCIAL PLANNING BASICS THURSDAY, 9TH OCTOBER 2025

Impact:

- Enhanced financial discipline
- Better cost and revenue understanding

Way Forward:

- Startups were advised to maintain regular financial tracking systems.



45 DAYS INCUBATION TRAINING PROGRAM (IDEA STAGE) 2.0

MODULE 13: LEGAL FOUNDATION & REGISTRATIONS THURSDAY, 9TH OCTOBER 2025

As part of the 45 Days Incubation Training Program (Idea Stage) 2.0, a theory session on the topic **“Legal Foundation & Registrations”** was conducted on 9th October, 2025 at MTI-HUB. The session was led by **Shri Yumnamcha Henthoiba Mangang, Chartered Accountant, NHYT & Associates**

The legal and registration module covered essential compliances for startups, including company registration, MSME and Startup India registration, taxation basics, and statutory requirements.

Participants gained clarity on choosing appropriate legal structures for their ventures.



45 DAYS INCUBATION TRAINING PROGRAM (IDEA STAGE) 2.0

MODULE 13: LEGAL FOUNDATION & REGISTRATIONS THURSDAY, 9TH OCTOBER 2025

Impact:

- Improved compliance awareness
- Reduced legal risks

Way Forward:

- Startups were encouraged to complete registrations at early stages.



45 DAYS INCUBATION TRAINING PROGRAM (IDEA STAGE) 2.0

MODULE 15: MOCK PITCH & FEEDBACK SESSION FRIDAY, 17TH OCTOBER 2025

The concluding module involved mock pitch presentations by the incubated startups. Each team presented their refined business ideas and received constructive feedback from the jury members.

The session helped participants improve their pitching skills, clarity of thought, and investor readiness.

Jury Members:

- Shri Roshnikumar Yambem, Managing Director, Globizs Web Solutions Pvt. Ltd.;
- Dr. Sorokhaibam Keshorjit Singh, Assistant Professor, MIMS, Manipur University



45 DAYS INCUBATION TRAINING PROGRAM (IDEA STAGE) 2.0

MODULE 15: MOCK PITCH & FEEDBACK SESSION FRIDAY, 17TH OCTOBER 2025

IMPACT:

- Improved pitching skills
- Enhanced investor readiness

WAY FORWARD:

Startups were encouraged to participate in demo days, pitch events, and investor interactions.



30TH - 31ST OCTOBER 2025

45 DAYS INCUBATION TRAINING PROGRAM (IDEA STAGE) 2.0

DUE DILIGENCE PROCESS
30TH - 31ST OCTOBER 2025



45 DAYS INCUBATION TRAINING PROGRAM (IDEA STAGE) 2.0

Based on the outcomes, MTI-HUB will continue to support promising startups through advanced incubation, investor linkage, and government scheme facilitation.

The 45 Days Incubation Training Program (Idea Stage) successfully achieved its objectives of nurturing early-stage entrepreneurial ideas into structured and viable business concepts. The program significantly contributed to strengthening the startup ecosystem in Manipur and reaffirmed MTI-HUB's commitment to fostering innovation and entrepreneurship in the region.



WELCOME ABOARD



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