



**FOUNDATION FOR INNOVATION  
AND TECHNOLOGY TRANSFER**  
Indian Institute of Technology Delhi

# *Catalysing India's Research & Innovation Leadership*

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Delhi

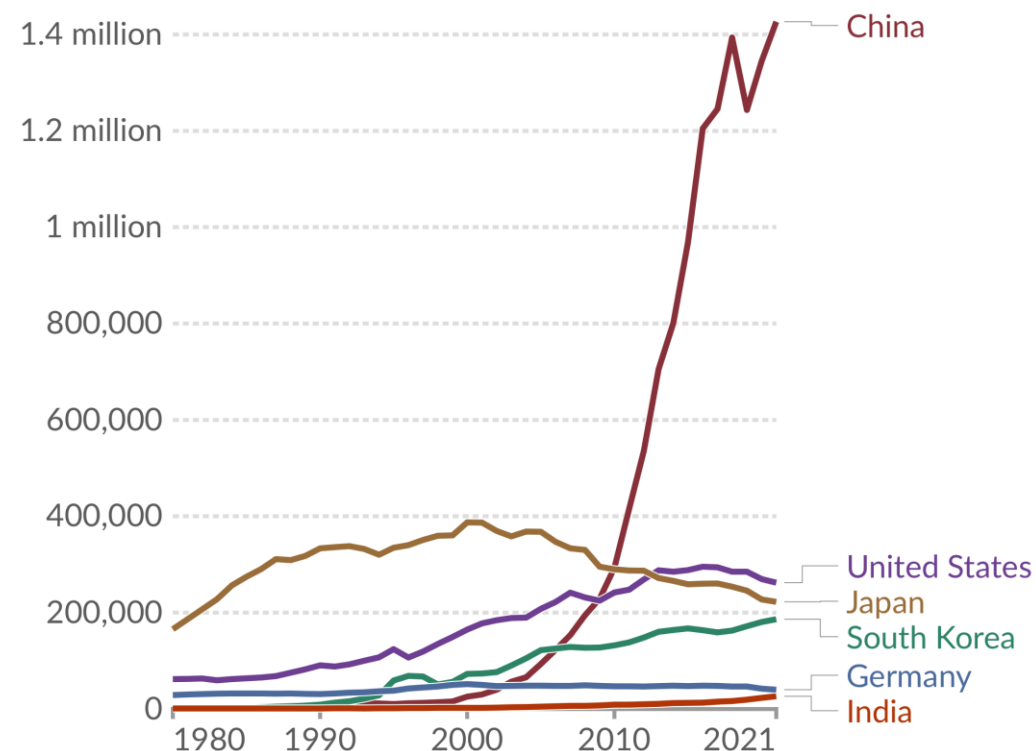
Picture: IITD Abu Dhabi  
Campus



# Patent applications in the world

## Annual patent applications

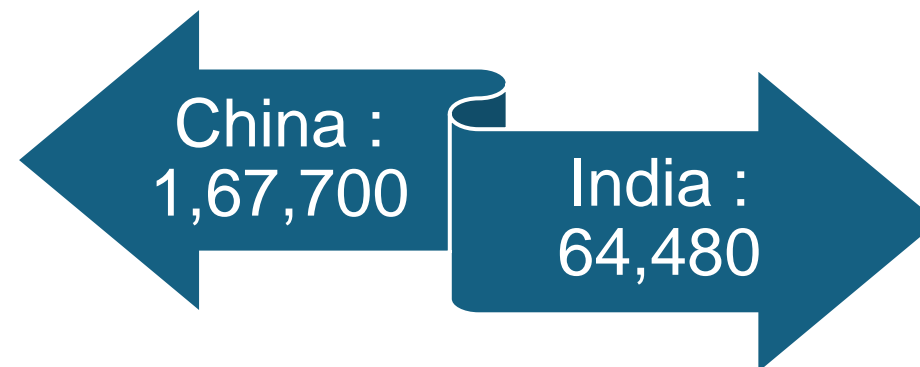
Our World  
in Data



Data source: WIPO via World Bank (2024)

Note: Each country's data includes patent applications for which the first-named applicant is a country resident.

OurWorldinData.org/research-and-development | CC BY



- India recorded the fastest growth in patent applications in 2023 among the top 20 origins, marking the **fifth consecutive year of double-digit growth**. India ranks **sixth globally for patents applications**.

- **Industrial Designs:** Between 2018 and 2023, **patent and industrial design applications** more than doubled.

- **The top three sectors - Textiles and Accessories, Tools and Machines, and Health and Cosmetics—**made up almost half of all design filings.



# 10 Challenges of Industry – Academic collaboration

**1. Differing Objectives and Timelines**

**2. Technology Readiness Gap**

**3. IP Ownership and Licensing Complexity**

**4. Lack of Mutual Understanding**

**5. Rigid Institutional Processes**

**6. Limited Exposure and Mobility for professors**

**7. Funding Model Incompatibilities**

**8. Absence of Translational Ecosystems**

**9. Inadequate Recognition of Applied Research**

**10. Geographic and Sectoral Disconnect**



# Our experiences for Bridging the Gap for Overcoming Academia–Industry Challenges

## Aligning Objectives with Shared Value Creation

- At FITT, we co-design research programs with industry partners—ensuring academic rigour meets market relevance from day one

novo nordisk  
**foundation**

Benefitting people and society



**SONA COMSTAR**

## Supporting Lab-to-Market Transitions (TRL 3 to 7+)

- We operate as a translational engine—helping move ideas from TRL 3 proof-of-concepts to TRL 7 deployable products

### Product dev. /validations

- FIRE
- BIRAC BIG
- Platform for Harnessing Deep-Tech (PHD)
- DIO – iDEX
- Sona Comstar-IITD Innovation Program
- Boeing BUILD
- Microsoft Unnati AI

### Pilot scale

- BIRAC SEED (30L)
- FITT Investment Fund (50-150L)
- Meta Accelerator (20L)
- DST CAWACH

## Institutionalizing IP & Tech Transfer Mechanisms

- FITT manages over 300+ industry contracts annually with streamlined IP frameworks and licensing support

The Foundation for Innovation and Technology Transfer (FITT) is responsible for managing the Intellectual Property operations at the Indian Institute of Technology Delhi (IITD)

- IP Fillings & Management
- Industry Mappings
- Marketing understanding negotiations and valuations
- Linkages and Product development support
- Spin off formations



# *Our experiences for Bridging the Gap for Overcoming Academia–Industry Challenges*

## Incentivizing Faculty and Student Engagement

- We integrate consulting, entrepreneurship, and industry collaboration into IIT Delhi's broader research culture.
- FITT Seed Support program for students
- FITT Innovation Fund for professors
- FITT SPARK Program

## Building Industry-Ready Innovation Infrastructure

- FITT manages thematic CoEs and R&D parks with plug-and-play facilities for startups and corporate labs
- 250,000 sq feet
  - State-of-art infrastructure
  - Dedicated space for startups
  - Dedicated space for company research units
  - Auditorium, board rooms, meeting rooms
- **50,000 Sq.ft. area with mechanical, electronics labs**
  - **20,000 Sq.ft. area with wet labs, life sciences labs, and calibration labs.**
  - **10,000 Sq.ft. area with prototyping labs**



Foundation for Smart Manufacturing (FSM) empowers the Indian industry to explore, develop, and implement Smart Manufacturing solutions.

IIT Delhi has been working on changing the curriculum to make more interdisciplinary and future ready students and workforce.

# Example : A Hub-and-Spoke Model for value creation

## Hub Institute

- 1) Acts as a National Innovation & Translational Hub.
- 2) Provides best practices, toolkits and Templates for industry collaborations.
- 3) Anchors a Dedicated Industry –Academia Connect cell.

IIT Delhi

## State-Level Spokes (Tier 1 Institutions)

- 1) 8–10 premier state institutes (e.g., NITs, State Tech Universities).
- 2) Receive structured training, frameworks, and support from IIT Delhi.
- 3) Build localized innovation ecosystems with industry participation

NIT Bhopal

NIT  
Durgapur

NIT  
Srinagar

## Local Cluster Spokes (Tier 2/3 Colleges – 10 per State Spoke)

- 1) 100+ engineering & polytechnic colleges as last-mile nodes.
- 2) Focus on grassroots problem statements, frugal innovation, and talent mapping.

10 Reginal  
Colleges

10 Reginal  
Colleges

10 Reginal  
Colleges



*At FITT, we don't just bridge the gap between research and industry—we build the highway, light it up, and ensure every researcher has a vehicle to drive their innovation forward.*