

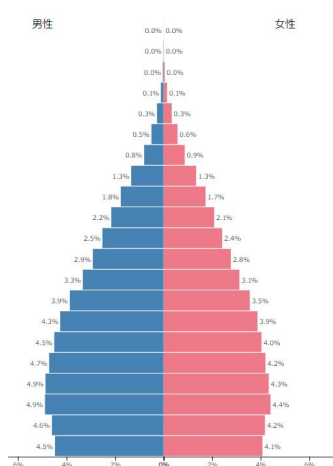
Indian Institute of Technology Hyderabad (IITH)

The Project for **F**uture **R**esearchers at **I**ITH to **E**nhance **N**etwork **D**evelopment with **S**cholarship of Japan, Phase 2 (FRIENDSHIP 2.0)

JICA FRIENDSHIP2.0 Project Team

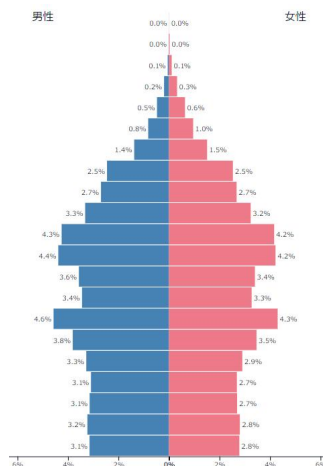
2025/1

Vibrant India



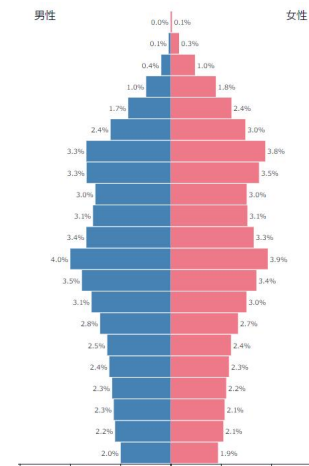
India

Average age 28 years old



China

Average age 38 years old



Japan

Average age 48 years old

Indian Philosophy

Jugaard (flexible thinking)
Agile (agile action)

Make in India

Indian Mentality

- ✓ Hungry spirit
- ✓ Challenging spirit (think before act)
- ✓ Flexibility
- ✓ Own Risk→High ownership
- ✓ Do something and get it done

India and Japan

Hinduism and Buddhism

- The Hindu god Shiva is the Buddhist Daikokuten
- The Hindu god Kubera is the Buddhist Bishamonten
- The Hindu god Indra is the Buddhist Teishakuten

Indira, an elephant gifted from India in support of Japan's postwar recovery.



- Japan-India Digital Partnership (2018)
- Japan-India Comprehensive Economic Agreement (2011)
- Free and Open Indo-Pacific

- ◆ Solving global social issues.
- ◆ Fostering industries that leverage the strengths of both countries.
- ◆ Developing and utilizing high-level human resources

Population of approximately 1.4 billion

Approximately 2 million science and engineering graduates per year

1,455 Japanese companies (4,948 offices)

I. Indian Institute of Technology Hyderabad (IITH)

General Information

IITH Brochure 2023 (Digital Book)

<https://flip.iith.ac.in/books/mtdi/#p=1>

Indian Institute of Technology Hyderabad (IITH)

Outline



The Indian Institutes of Technology (IITs) is India's premier and world-famous national group of higher education institutions in the field of engineering.

IITH is a second-generation institution established by the Ministry of Education(MHRD) in 2008. It has 17 departments, including the first AI department in India.

IITH is ranked 8th among the 23 Indian Institutes of Technology. QS World Ranking 581-599th (as of 2023)

Rich human resources



Number of faculty members: 325

Number of students (enrollment): 5,268 (1,472 doctoral students)

(as of 2024)

Diversified networks



Academic affiliations: 15 universities, 4 graduate schools, National Institute of Advanced Industrial Science and Technology, RIKEN, National Institute for Materials Science, etc.

Affiliated Japanese companies: more than 100 (as of 2024)

High potential



Number of patent filed: 294 (Cumulative as of 2024)

Number of published papers: 9,238 (Cumulative as of 2024)

Number of external projects: over 100 million USD (Cumulative as of 2024)

Employment in Japanese companies

Employment more than 200 graduates in more than 50 Japanese companies until now

Internship more than 80 (2024)

Examples of employment

Rakuten, Yahoo Japan, NTT, Accenture Japan, etc.

(The figure on the right shows the major employment opportunities in 2021.)



(Source: IITH Website)

Educational programs

● Under Graduate

- Bachelors of Technology (B.Tech)
- Bachelors of Design (B.Des)

● Post Graduate

- Master of Technology (M.Tech)
- Master of Design (M.Des)
- Master of Science (M.Sc)
- Masters in Arts (MA)

● Doctoral Program

- All departments (except Engineering Science)

● Professional

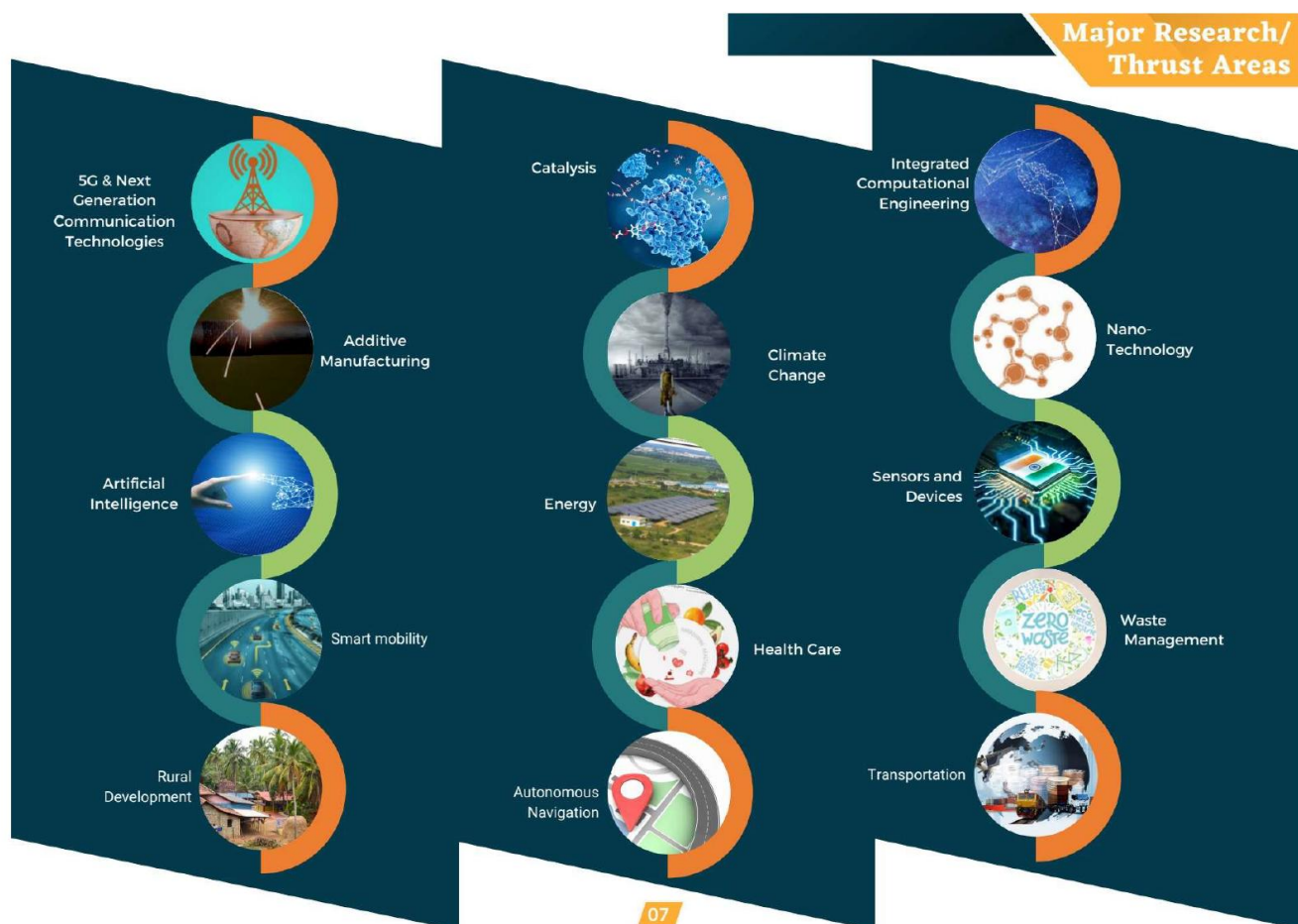
- Master of Technology (Executive M.Tech)
- Biodesign

● Regular Ph.D. Programs

- [Artificial Intelligence](#)
- [Biomedical Engineering](#)
- [Biotechnology](#)
- [Center for Interdisciplinary Programs](#)
- [Chemical Engineering](#)
- [Civil Engineering](#)
- [Climate Change](#)
- [Computer Science and Engineering](#)
- [Electrical Engineering](#)
- [Materials Science and Metallurgical Engineering](#)
- [Mechanical and Aerospace Engineering](#)
- [Chemistry](#)
- [Physics](#)
- [Mathematics and Computing](#)
- [Liberal Arts](#)
- [Design](#)
- [Engineering Science](#)
- [Entrepreneurship and Management](#)
- [Heritage Science and Technology](#)

● Interdisciplinary Ph.D. Programs

- Others (International Fellowship Programs and etc.)



出所：IITH Brochure 2023

Academic Collaboration Network (Research & Human Resource Exchange)



MoU

- ☐ **University-wide agreement 15:** Univ. of Tokyo, Osaka Univ., Hokkaido Univ., Ritsumeikan Univ., Shimane Univ., Tokyo City Univ., Kanazawa Univ., Shizuoka Univ., Waseda Univ., Yokohama National Univ., Hiroshima Univ., Saitama Univ., Shibaura Institute of Tech. Akita International Univ., Aizu Univ.
- ☐ **Department-wide agreement 4:** Univ. of Tokyo Eng./Information, Osaka Univ. (Science/Eng. Hokkaido Univ. (Eng.) , Kumamoto Univ. (Eng.)
- ☐ **Research Institutions 5:** Inter-University Research Institute Corporation High Energy Accelerator Research Organization (KEK), RIKEN Center for Integrated Research on Innovative Intelligence, National Institute of Advanced Industrial Science and Technology (AIST), National Institute for Materials Science (NIMS), National Research Institute for Earth Science and Disaster Prevention (NIED)

Human Resource Exchange

- ☐ Phase-1: Visiting IITH faculty members to Japan (152), Visiting Japanese university faculty members to IITH (119), MoU on student exchange concluded, online internship held (Hiroshima University)
- ☐ Phase-2: Currently conducting joint research-based researcher exchange, student exchange through the Sakura Science Program, etc.

Joint Research (Project Grant)

- ☐ Phase-1: 7 projects
- ☐ Phase-2: 31 Projects (12 in Batch 1, 10 in Batch 2, 9 in final Batch)

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Industry-University Collaboration

(Research and Human Resource Exchange)



☐ MoU: More than 22 companies

Hitachi Zosen, DENSO, JFE Steel, Allied Telesis, Nagoya Electric Works, Chaintope, Asahi Kasei • Asahik Kasei Electronics, KDDI Research, Weathernews, NTT-AT, Toshiba Memory, Terra Drone, Takenaka, ENRISSION, OMRON, SUZUKI, Tech Japan, Business Break Throug, New Frontier Capital Hongokong, I'mbesideyou., Beyond Next Ventures, Renesas Electronics India, etc.

☐ Recruitment: More than 13 companies

Yokogawa Electric, Rakuten Group, Rakuten Mobile, NTT-AT, DENSO, SUZUKI, NSK, Woven By Toyota, Kameda Seika, Fast Retailing, PayPay, KIOXIA, Soft Bank, etc.

☐ Exhibition in Japan

Since 2017, IITH has exhibited eight times at CEATEC JAPAN and other exhibitions for Japanese companies in order to strengthen industry-academia collaboration.

☐ Joint Research (FRIENDSHIP2.0 Research Grant)

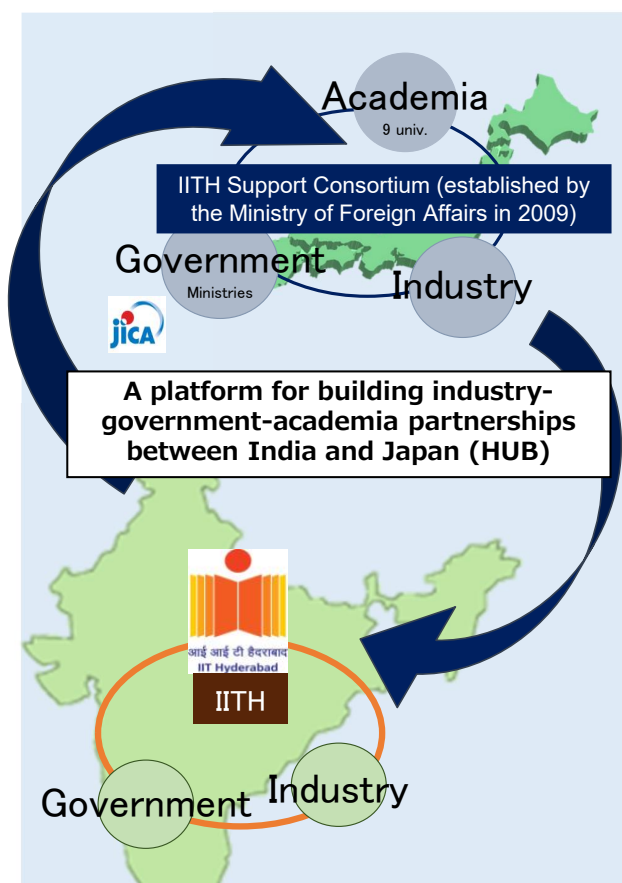
4 project in the Phase 2. (Waste water, Concrete, LO battery, Medical device)

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II. The Project for **F**uture **R**esearchers at IITH to **E**nhance **N**etwork **D**evelopment with **S**cholarship of Japan, Phase 2 (**FRIENDSHIP 2.0**)

Overall picture and significance of IITH support

Foundation for Deepening India-Japan Cooperation



✓ India for Japan

= Huge market, technology infrastructure, pool of engineers and other high-level human resources
= A certain number of companies have entered the market, but many are struggling.

✓ Japan for India

= Japan's high level of research capability, such as consistently producing Nobel Prize winners, and the technological strength of Japanese companies.

The Future of India-Japan Relations

✓ Building long-term relationships and fostering trust in Japan

- Through multilayered exchanges and support, understanding and appreciation of Japan among professors and others has spread. Developing various collaboration and exchange activities such as joint industry-university research, job fairs, etc.

✓ Research capacity, pool of good talent, potentiality- -

Top university among newly established IITs, attracts excellent researchers and students, research facilities and other facilities are still developing, new faculties such as AI department and development studies course will be opened in 2019, further room for growth.

Strengths of IITH

Current Initiatives

1. Campus development (ODA loan)
2. FRIENDSHIP Program (technical cooperation)
 - (1) Research human resource development
 - (2) Inter-university network (research and human resource exchange)
 - (3) Industry-university-government network (research and human resources exchange)

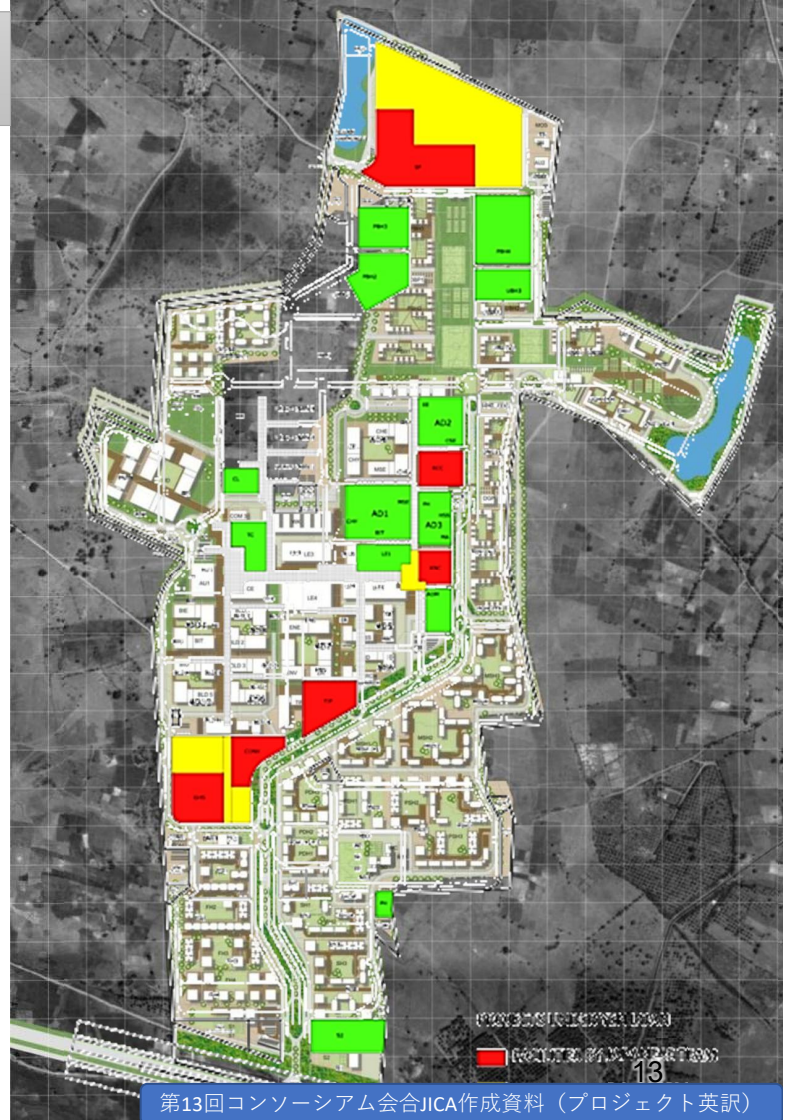
New Campus Development

キャンパスデザインプロジェクト（東大）による設計施設 Facilities designed by the Campus Design Project (The University of Tokyo)

- ◆ 学生会館 Student Sports and Cultural Complex
- ◆ 中央図書館 Knowledge Center
- ◆ 総合研究センター Research Centers Complex
- ◆ ビジネス・インキュベーションセンター Technology Incubation Park
- ◆ 国際会議場 Convention Centre
- ◆ 国際交流会館 International Guest House

キャンパスデザインプロジェクトが助言するエリア（設計施設の外構部分） Areas advised by the Campus Design Project (exterior portions of the designed facility)

インド側がデザインを行い、建設費用を円借款で支援する施設 Facilities to be designed by the Indian side and construction costs to be supported by Japan's ODA Loans.



第13回コンソーシアム会合JICA作成資料（プロジェクト英訳）

FRIENDSHIP Project



FRIENDSHIP1.0



<Period>

2012～2021

<Achievement>

Scholarship: **116**

IITH faculty visited Japan:

153

Japanese Univ. faculty visited IITH: **119名**

FRIENDSHIP2.0

<Period>

2021年～2026年

<Objectives>

Building a sustainable platform for academic and industry-university collaboration between Japan and India at IITH

<Activities>

- ① Strengthen Japan Desk
- ② Scholarship (PhD)
- ③ Academic collaboration Research Grant
- ④ Industry-university collaboration Research Grant



JAPAN DESK
ジャパデスク

Sustainable Platform for Collaboration

FRIENDSHIP2.0

IITH Project Team Members



Project Director
Prof. Murty B. S.
Director of IITH



Project Manager
Prof. Panda Tarun Kanti,
Dean of International
Relations



Project Member
Prof. G Narahari Sastry, Dean of
Sponsored Research and
Consultancy



Project Member
Prof. Prof. C. Malla Reddy,
Dean of Innovation,
Translation & Startups) - S.
Surya Kumar



Project Member
Prof. Bharat Bhooshan
Panigrahi
Dean of Academic



Project Member
Prof. Mahendrakumar
Madhavan
Dean of Alumni & Corporate
Relations



Project Member
Assoc. Prof. Chandrasekhar
Murapaka
IITH Japan Cooperation Cell
(IJCC)



**IITH Japan Desk
Officer**
Ms. Pranitha Avvaru



FRIENDSHIP2.0

JICA Project Team Members

Management Team



Mr. SAITO Kunitoshi
Chief Advisor

Ms. KASAI Chikako
Deputy Chief
Advisor



Prof. MIKI Chitoshi
Expert,
Engineering &
Higher Education
(Former President,
Tokyo City University)

Dr. NAKANO Kyoko
Expert,
Higher Education
(President,
Human Link Inc.)



Dr. SANO Hiroshi
Expert,
Engineering Education
(Mitsubishi Chemical
Group Corporation)



Ms. OZAWA Midori
Expert,
Higher Education, Management of
International Collaboration



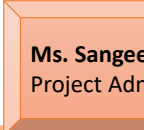
Ms. OHARA Rieko
Expert,
Japan Desk
Operation



Ms. TSUJI Emiko
Expert,
Japan Desk Operation



Dr. Sai Chandra Teja R.
Project Consultant



Ms. Sangeeta
Project Administrator



Mr. TANJI Daisuke
Expert,
Japan Desk Operation



**Professors at Japanese
universities
for joint research activities**

Industry-University Collaboration with IITH

Wide range of research fields (IITH's technology seeds)

Artificial Intelligence, Biomedical Engineering, Chemical Engineering, Biotechnology,, Climate Change, Civil Engineering,, Computer Science & Engineering, Electrical Engineering, Engineering Science, Materials Science & Metallurgy, Mechanical & Aerospace Engineering Chemistry, Physics, Mathematics Liberal Arts, Design, Entrepreneurship & Management

Outstanding human resources

- Providing a large number of undergraduate degree holders from IITH and Japanese universities to Japanese companies.
- Various collaboration schemes including joint research with IITH and internship programs for IITH students

Core Technology Development
Vast market
Exciting Culture

Japan Desk's One-stop service



- Provision of information on research grants
- Provision of Joint Research Grant
- Support for internships for IITH students and recruitment by Japanese companies

FRIENDSHIP 2.0 Project is supporting



Source : <https://www.youtube.com/channel/UCRzG67KYJuTbL-Te2objPTw>

Academic Cooperation with IITH

Participation in the Japan-India Partnership

- SATREPS (Science and Technology Research Partnership for Sustainable Development Program)
- SICORP (Strategic International Collaborative Research Program), etc.
- Partnership programs such as India-Japan Industry-Academia-Government Collaborative Education

FRIENDSHIP Scholarship

- 143 graduates studied at graduate schools in Japan (23 with master's degrees, 40 with doctoral degrees)

FRIENDSHIP Research Grant

- About 30 joint research projects
- Researcher exchange
- Co-supervision of post graduate students

Further invigoration of international exchange
Expansion of research areas
Excellent international students

Japan Desk's One-stop service



- Technical Support for study in Japan, exchange with Japanese students, exchange with Japanese researchers, the presentation of research achievements in Japan

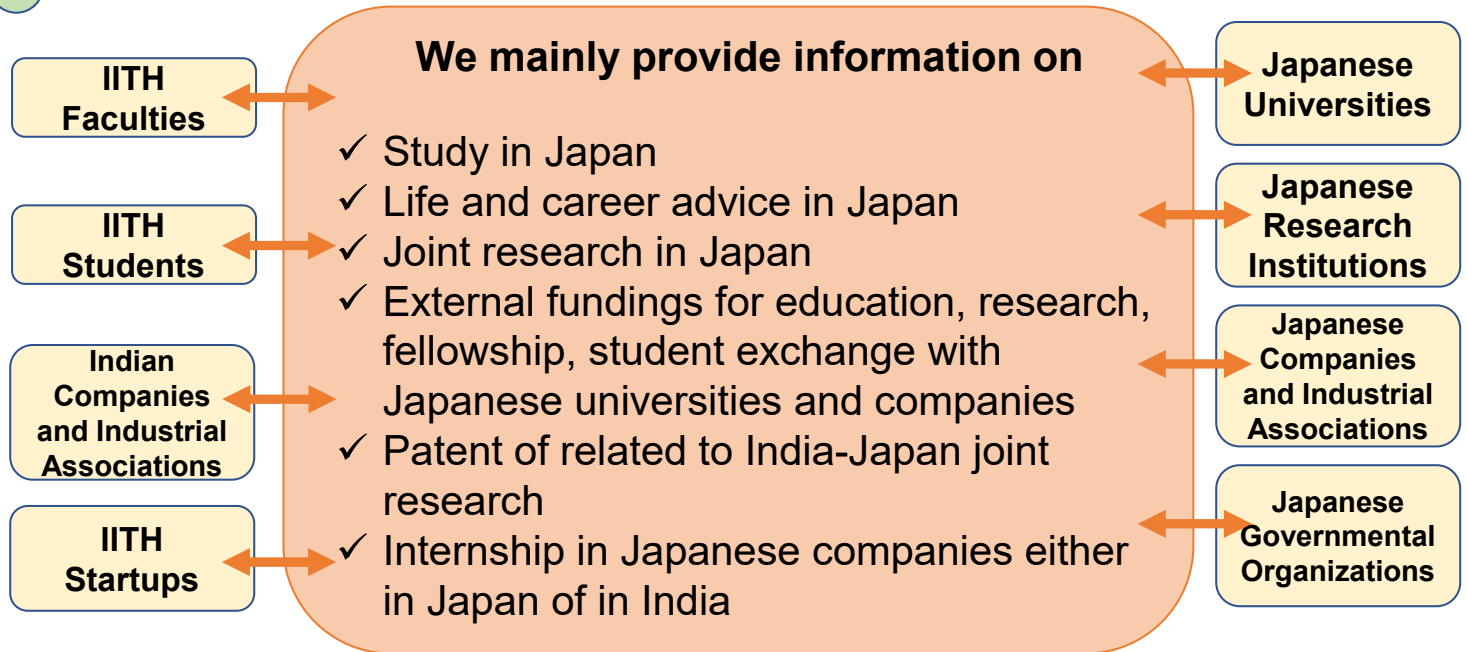
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Japan Desk

One-stop window for information on academic and industry-university collaboration between India and Japan, including joint research with Japan and study in Japan



One Stop Service to Bridge India and Japan

For inquiries, please contact

Japan Desk

< iith.japandeskgeneral@gmail.com >