



सत्यमेव जयते

शिक्षा मंत्रालय  
MINISTRY OF  
**EDUCATION**



**STUDY IN INDIA**  
LEARN | DISCOVER | INNOVATE

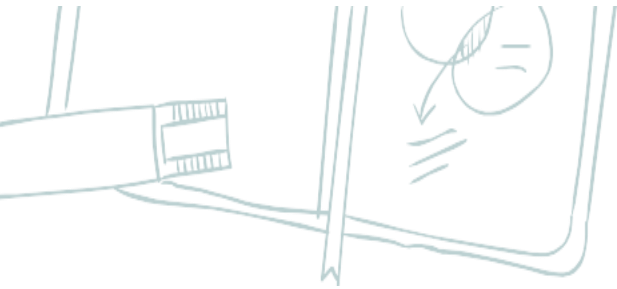
# **Study in India Programme, Ministry of Education**

Brief: India's Higher  
Education System, a step  
towards cooperation with  
Austrian Universities

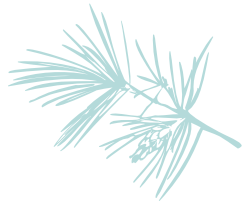
**Executing Agency**



Education • Innovation • Transformation



# AGENDA



- **Brief: India's HEIs**
- **India's Education System**
- **Focus areas in present trends**
- **Possible Cooperation Opportunities with Austria**
- **Remarks**



# INTRODUCTION

India's higher education is pursued after 12 years of Schooling, while the entry to schooling formal learning begins from age group of 5+ and entry to University education is by 18+.

The Higher Education is offered through the University system of Education

- ✓ Graduate 3-4 years, (for Medical 4 years + 1 year Internship)
- ✓ Post Graduate 2 years
- ✓ Doctoral 3-5 years

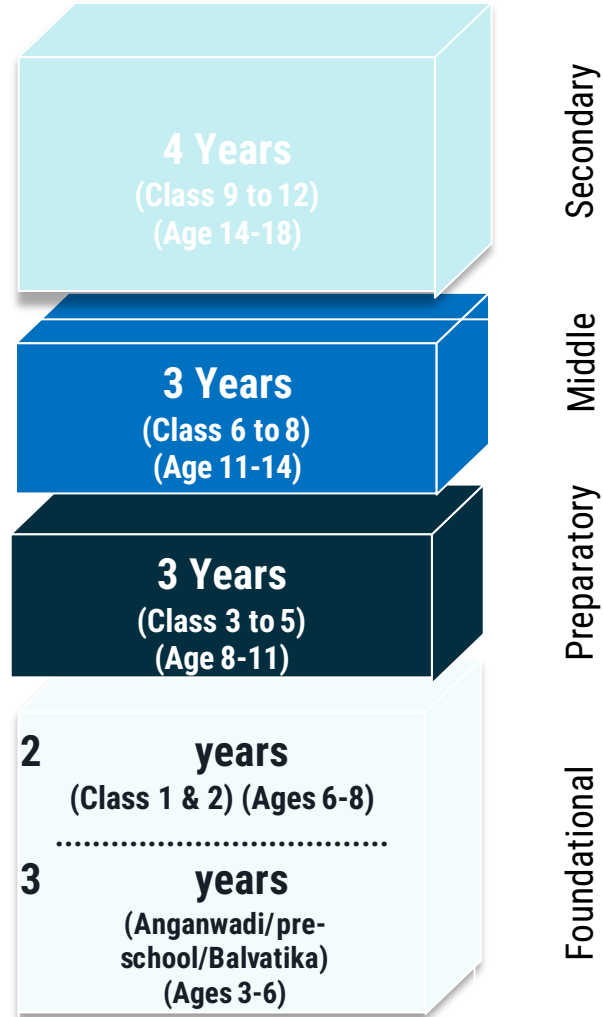
The Universities/ Institutions are based on Subjects of Studies viz., Engineering & Technology (IITs, NITs, IIITs, state level Universities), Agriculture, Biotechnology, Management (IIMs), General (offering arts, science, commerce, management etc.), Fisheries, Forestry, Petroleum, Marine, Arts & Music, & many more.



**Universities/ Institutions by TYPE of establishment**  
**Centrally Funded** (by Parliament Act, UGC-MoE)  
**State Legislature** Govt. + Pvt.  
**Deemed to be University (UGC Act)** Govt. + Pvt.

# Indian Education System

12 years of Schooling System



New pedagogical and curricular structure of school education (5+3+3+4): 3 years in Anganwadi/Pre-school

**Secondary Stage (4)** multidisciplinary study, greater critical thinking, flexibility and student choice of subjects

**Middle Stage (3)** experiential learning in the sciences, mathematics, arts, social sciences, and humanities

**Preparatory Stage (3)** play, discovery, and activity-based and interactive classroom learning

**Foundational stage (5)** multilevel, play/ activity-based learning



# Nalanda University

- Nalanda one of the oldest Buddhist University of 5th - 6th Century
- Nalanda was a renowned Buddhist University which was situated in the ancient kingdom of Magadha, which is in present-day Bihar
- Nalanda was established around the 5th or 6th century (by carbon dating)

**THE ANCIENT INDIAN SCIENTIST WHO WAS CHANCELLOR OF NALANDA UNIVERSITY**

**NAGARJUNA**

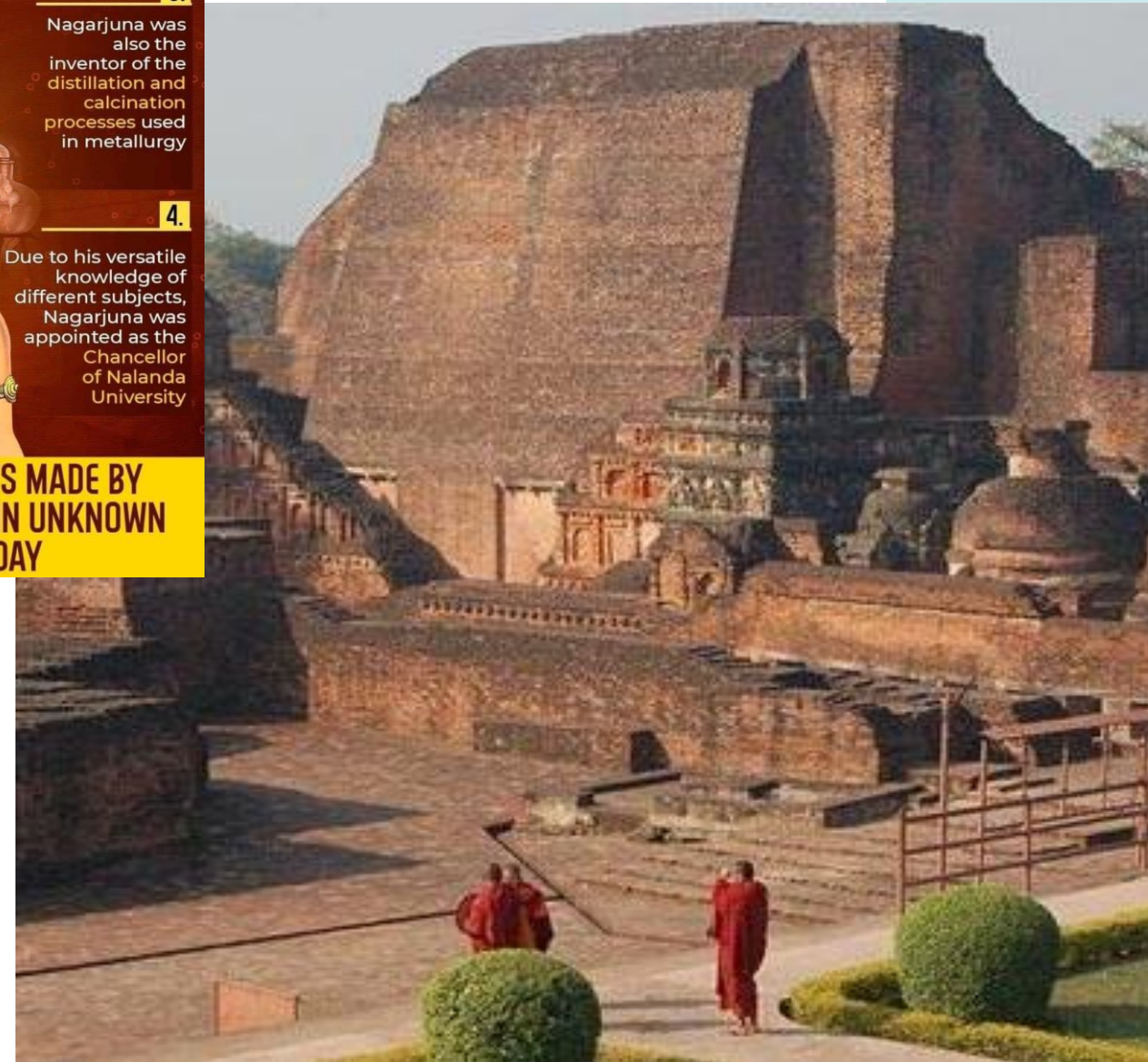
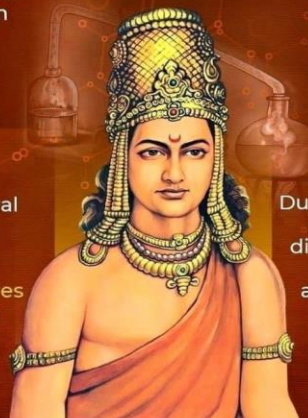
1. Nagarjuna was an Indian metallurgist and alchemist, born near Somnath in 931 CE

2. He wrote several texts that deal with the extraction of metals from ores & preparations of mercury compounds

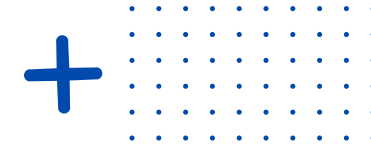
3. Nagarjuna was also the inventor of the distillation and calcination processes used in metallurgy

4. Due to his versatile knowledge of different subjects, Nagarjuna was appointed as the Chancellor of Nalanda University

**SCIENTIFIC ADVANCEMENTS MADE BY INDIANS IN THE PAST REMAIN UNKNOWN TO THE WORLD TODAY**



# Modern Educational Institutions | Universities

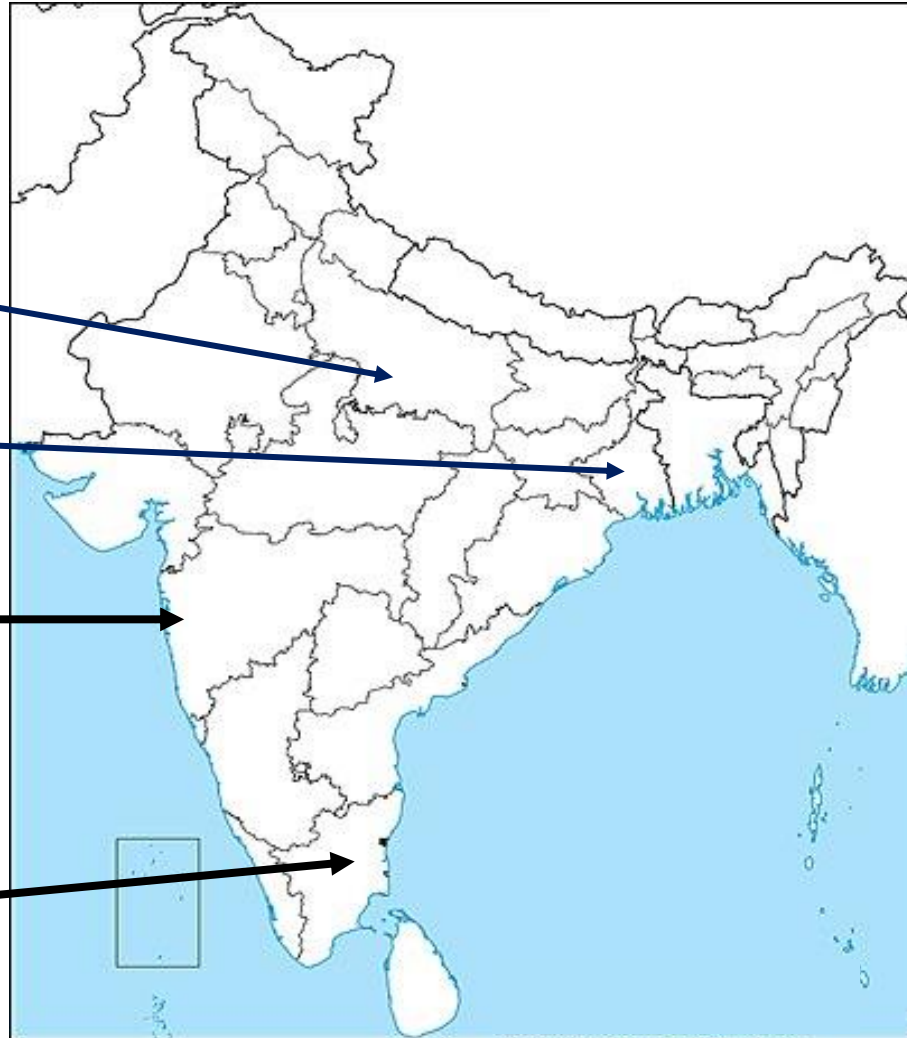


University of  
Allahabad

University of  
Calcutta

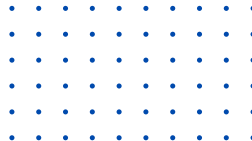
University of  
Bombay

University of  
Madras



The University of Bombay, Calcutta, Madras was established on January 24th, 1857, followed by University of Allahabad 1858.

The Indian University Act 1904.

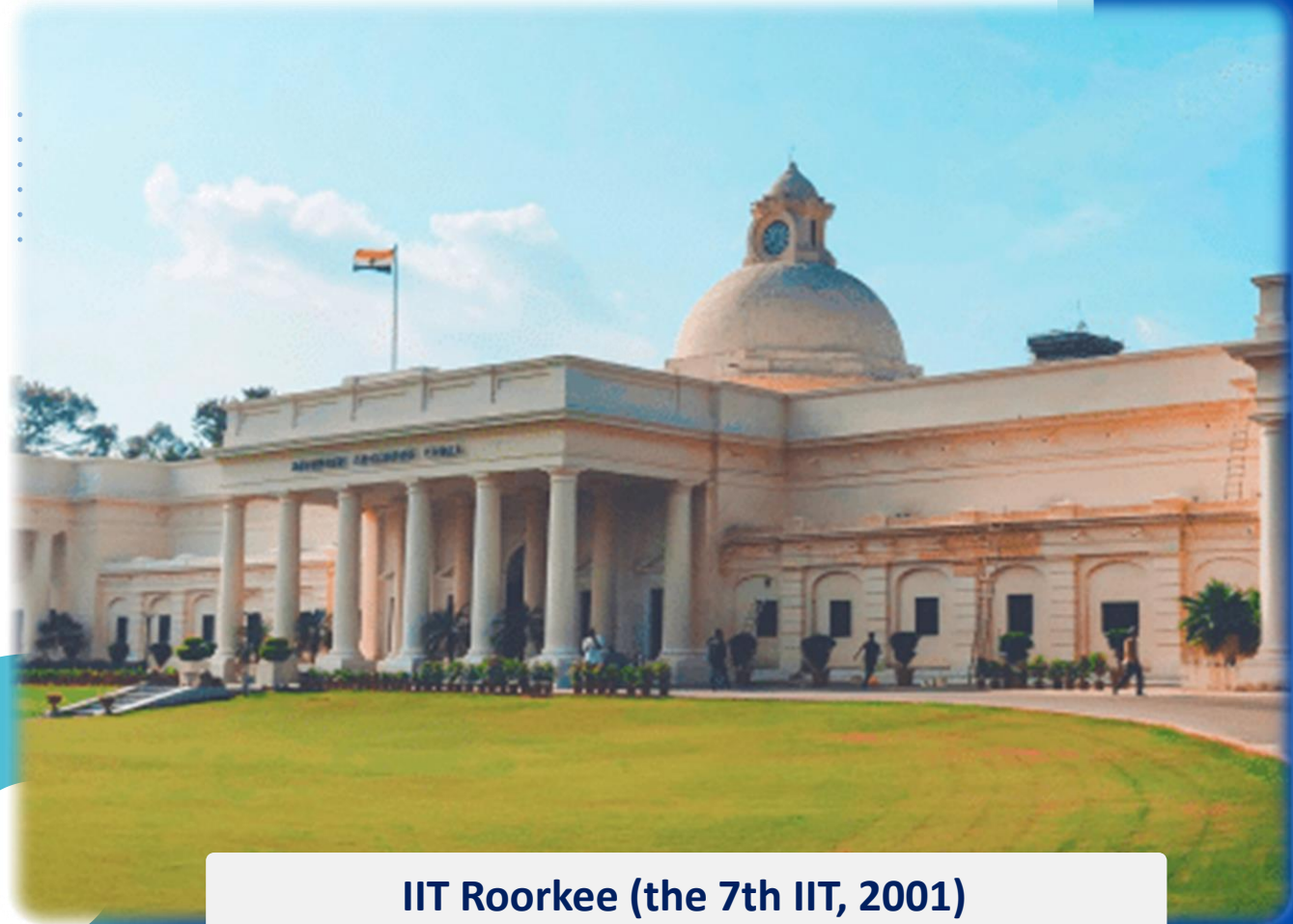




# 1st Engineering College, before India's independence (now IIT Roorkee)

+

- The 1<sup>st</sup> Engineering College was established in 1847 for training of Civil Engineers, the Thomason College of Civil Engineering, made use of large workshops, public building, that were erected for Upper Ganges Canal.
- Established by Lord Dalhousie
- 1949, renamed as University of Roorkee



**IIT Roorkee (the 7th IIT, 2001)**

...started as training college for Civil Engineering

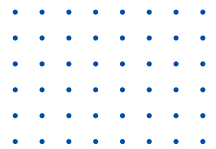
# 1st Technical institution in Independent India



- The development of higher educational institutes such as IITs took place in the mid 20th century, to promote technical education
- The 1st IIT established at Kharagpur in 1951, exclusive Engineering & Technology Institute



Indian Institute of Technology Kharagpur







# Organization of Higher Education in India

Number of Higher Education Institutions & Profile

# India's HEIs

• <b>Total Number of Universities/ Institutions</b>	<b>1 168</b>
Number of Government Universities	685
Number of private (non-government)	473
Private Deemed Universities	10
Open Universities (including IGNOU, MoE)	18
• <b>Discipline wise Universities/ Institutions</b>	
General Universities (Arts, Science, Commerce etc.)	665
Technical – Engineering, Technology,	192
Medical Universities	29
Agriculture, Horti, Forestry, Veterinary	57
Law & Judicial Sciences	27
Languages – Sanskrit, English, Foreign Languages	27
Other specialized institutions	125

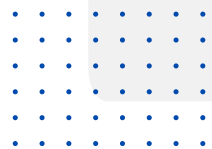
- 45,473 affiliated Colleges to 328 universities
- 12,002 standalone institutions
- 3301 Teacher Training colleges
- 3592 Nursing
- 327 Standalone Management Institutions
- 100+ institutions of other Ministries
- 758 Paramedical Institutions
- 59 Hotel Management & Catering Institutes

# Globally ranked Institutions

- **THE World University rankings 2024: Indian Institute of Sciences, Bangalore ranked between 201 to 250**
- **Universities ranking 501 to 600 include Anna University, Chennai, Mahatma Gandhi University, Kottayam, Shoolini University of Biotechnology & Management Science, HP**
- **QS world ranking 2025 for Universities**
  - **69 Indian Universities secured position within 424**
  - **12 Indian Institutes of Eminence (IoE) secured 47 positions in top 100**

**IIT Bombay**  
**IIT Delhi**  
**IIT Kharagpur**  
**IITM**

**118<sup>th</sup>**  
**150<sup>th</sup>**  
**222<sup>nd</sup>**  
**227<sup>th</sup>**





# QS Ranking: Research & Collaboration



India's Global Average ranking in Asia is highest

10 Universities are ranked top in Asia

Anna University followed by IISc & IIT Guwahati

SPARC, Scheme for Promotion of Academic & Research Collaborations

- **Improve the research eco system of India's higher education institutions between India's HEIs and best institutions in the world from 28 selected nations, jointly solve problems of national and international relevance**
- **Visits & long stay by faculty and researchers**
- **Joint development of niche courses, world class books, monographs, translatable patents, demonstrate technologies, action research**
- **Publication & disseminations**
- **Patent, products, scaled up pilot plants, demonstration**

# Higher Education Institutions (HEIs)

- Present enrolment in HE is 43.3 million students;
  - 79% in UG
  - 12% in PG (Master's degree)
  - 0.5% for PhD and in another major for sub-degree/ Diploma courses
- Majority of Undergraduate students are enrolled for:
  - Arts & Humanities (34%)
  - Science (15%)
  - Commerce (12%)
  - Engineering & Technology (12%)
- For Postgraduate/ Masters' Courses, popular disciplines are as follows:
  - Social Science 21%
  - Science 15%
  - Management 14%
- While for PhD Courses, students prefer:
  - Science 21%
  - Engineering & Technology 25%

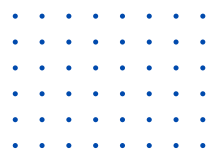
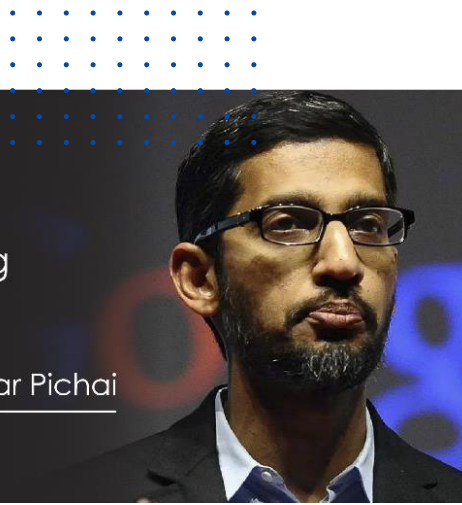
- India is **World's 2nd largest higher education system** having 58,000 HEIs (in the last One-year 2400 are added)
- Gross Enrolment in higher education is 28.4% (2022)

# Top Indian-Origin CEOs

Sundar Pichai	Google & Alphabet
Satya Nadella	Microsoft
Arvind Krishna	IBM
Shantanu Narayen	Adobe Systems
Leena Nair	Chanel
Nikesh Arora	Palo Alto Networks
Pawan Munjal	Hero Motocorp
Jayshree Ullal	Arista Networks
George Kurian	NetApp
Laxman Narasimhan	Starbucks
Ajay Banga	President, the World Bank
Sanjay Mehrotra	Micron Technology
Anjali Sud	Vimeo
Kris Singh	Holtech International

"It is important to follow your dreams and heart. Do something that excites you."

Sundar Pichai





# Scientists of India

World Famous Indian Scientists Who Give new Dimension, Meaning and revolutionised World Science:



Jagadish  
Chandra Bose



Prafulla chandra



Satyendra-nath-bose



Meghnath Saha



Prasanta  
Chandra  
Mahalanobis



Gopal-  
Chandra-  
Bhattacharya



Ananda  
Mohan  
Chakrabarty



Subhash  
Mukhopadhyay



CV Raman



Har Gobind  
Khorana



Homi  
Jehangir  
Bhabha



Vikram  
Sarabhai



Subrahmanyan  
Chandrasekhar



Srinivasa  
Ramanujan



Ashoke Sen



Dr. Sankar  
Chatterjee



Vilayanur  
S. Ramachandran



Venkatraman  
Ramakrishnan



Jayant  
Vishnu Narlikar



A. P. J. Abdul  
B. Kalam



# Cooperation with AUSTRIA – INDIA, academic, research & beyond





# Austria-India

## Academic, research & related

- ✓ Institutional Partnerships

Several Austrian universities have formal partnerships with Indian institutions

- ✓ Erasmus+ Mobility and Capacity Building
- ✓ Eurasia-Pacific Uninet (EPU)

EPU is a network that establishes contacts and scientific partnerships

- ✓ 'Focus India' Initiative
- ✓ International Institute for Applied Systems Analysis (IIASA), a platform for researchers to collaborate and develop technology products



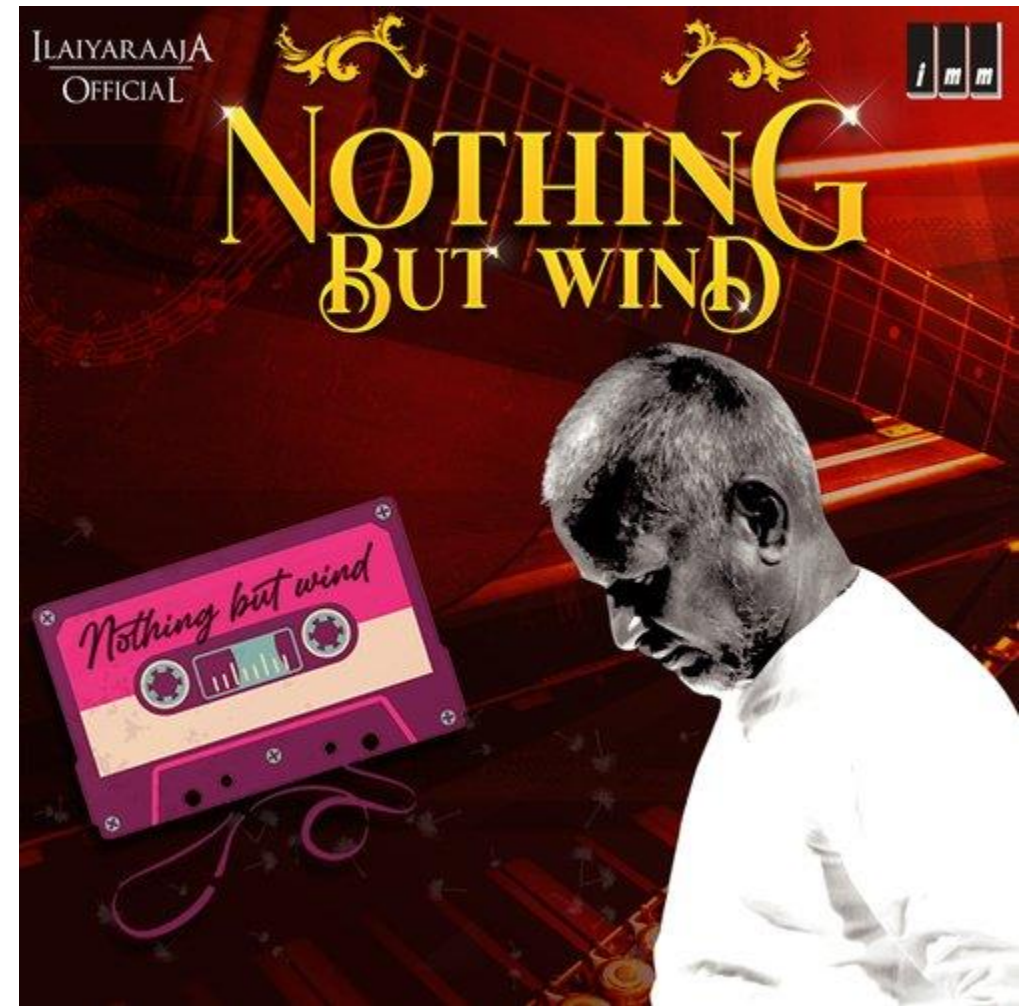


<https://www.youtube.com/watch?v=mo1GaxCFOSE>

[https://www.youtube.com/watch?v=VmTdN\\_3vYRo](https://www.youtube.com/watch?v=VmTdN_3vYRo)

# Mozart, by an Indian

## Indian & Mozart Fusion







THANK YOU

**Dr. B.  
Chandrasekar  
Executive  
Director, EdCIL**