### **IITH-JICA Collaboration**

#### **Greetings!**

am sure you all agree that the collaboration with Japan and Japanese universities is one of the remarkable milestones in the journey of IITH towards its success. I am confident this collaboration will continue for the time to come.

### The Official Development Assistance (ODA) Loan

Though it is well known, I felt it gave some insights on the Indo-Japan collaboration, especially the IITH-JICA relationship. The Japan Collaboration of IIT Hyderabad started in 2007 based on the commitment between Japan and India's then prime ministers. However, a formal note was exchanged in 2012 between the Government of India and the Government of Japan. After that, a series of meetings and discussions continued with the Japanese and Indian government officials to formalize a proposal and obtain a formal Expenditure Finance Committee (EFC) approval. On 28th January 2014, the Japan International Cooperation Agency (JICA) and the President of India have signed the loan agreements for ¥ 23035 million. Since then, JICA has become the nodal office for administrative approvals and financial sanctions for the ODA loan activities. The JICA has been the critical office from the beginning, even before entering into the formal exchange of a note between the two governments. JICA had enabled the exchange programs like the Japan-East Asia Network of Exchange for Students and Youth (JENESYS), especially for IITH students and faculty, to visit Japanese leading universities and industry to enhance the awareness and to strengthen the link between the two cultures. The very first batch of IITH students who visited Japan under the JENESYS program is seen in the Picture.



Picture: A team of IITH student's visited Japan under the JENESYS program (2010)

I thought it is time to remember and thank the officers from JICA, Japan and the Department of Economic Affairs, FM, and the then Ministry of Human Resources Development, Gol, who had supported collaboration **'Campus** this **Development Project of IITH'** from its inception. IITH fraternity is grateful to the following officers:

#### **JICA officers:**

- Mr. Shinichi Yamanaka, Mr. Hara san, Mr. Takema Sakamoto san: Previous JICA's chief representatives
- Mr. Kondo san, Ejima san, Mr. Moholkar, Mr. Endo san – JICA (I) officers
- Mr. Kitamura san, the then country office, south Asia
- Mr. Mikako Hataeda san, the then Dy director-general, south Asia dept.
- Mr. Tomohide Ichiguchi and
- Mr. Tanaka

#### The current JICA (I) office team:

Katsuo Matsumoto Chief Mr. san, Representative, JICA (I) office along with his entire team (Mr. Akimine, Mr. Tange, Mr. Ehara, Mr. Vineet Sarin, Ms. Nikita Sharma), without their support at every stage, this project would not have been launched promptly.

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#### **Indian government officials:**

- Shri R S Gujral, Finance Secretary, MoF
- Shri Ashok Thakur, Secretary (HE), and Shri Mathur, Addn. Secretary, the then MHRD during inception
- Shri R. Subrahmanyam, Secretary (MHRD),
   Smt. Amita Sharma, and Shri SS Sandhu,
   Addn. Secretaries, MHRD
- Prof. Uday B Desai, the then Director, IIT Hyderabad
- Mr. D. K. Ghosh, Coordinator, IITH-Japan collaboration project, IITH
- Prof. KVL Subrahmanyam, former and current Dean (Planning), IITH

Under this collaboration, human resources through exchange is the KEY activity Researchers FRIENDSHIP (Future at IIT Hyderabad to Enhance Network Development with Scholarship of Japan) program. The FRIENDSHIP Project's overall goal is to contribute to further development in the research activities of IITH through the worldclass research network between IITH and leading universities, research labs, and industry of Japan. The following five thrust areas are identified to match India's needs and Japan's strengths.

- (1) Environment & Energy
- (2) igital Communication
- (3) Design & Manufacturing
- (4) Nano-technology & Nano-science
- (5) Civil Engineering (Sustainability Development)

The first phase of the FRIENDSHIP program was started in 2012. The program was so designed that both students and the faculty of IITH could visit the universities, research labs, and leading industries of Japan. These visits have opened the doors for collaborative research in various fields of Science and Engineering. This program connects India with Japan not only in the field of science and technology but also paves a

strong path between two cultures. Incidentally, India and Japan share a common culture and values. I will take you through one of my impressions during my first visit to Japan in 2011. When we visited Canon Inc., Japan, we were told that the Canon Inc was known as 'Kwanon' in the 1900s, which is the name of the goddess of mercy (in Buddism) with 1,000 hands and even the logo carries the idol's impression. The name got changed eventually to 'Canon' in 1935 and the current format in 1956. The transformation of the logo can be seen in the picture. The point is that the goddess 'Kwanon' resembles the Hindu goddess 'Lakshmi.' This is because of Buddhism's spread. Under this project, a team of professors from the University of Tokyo lead by Prof. Fujino was formed to advise and oversee the construction activities at IITH. As a part of this, the team members Prof. Ohno and Prof. Kawazoe (architects) have provided architectural designs for the iconic buildings on campus.



Picture: Transformation of the 'Canons' logo (Photo courtesy: print-print.co.uk)



Picture: A group of IITH faculty with Team members of 'Campus Development Project of IITH' at the University of Tokyo, Japan (July 2011). Prof. Fujino and Prof. Kawazoe are seen in this picture (third and first from the left).

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Initially, the ODA loan (financial assistance) was proposed to build two iconic structures (Guest House and Sports and Cultural Complex) on campus; later, the scope was extended to support several buildings following a constant persuasion with the Japanese government and JICA. These buildings include Guest House, Sports and Cultural Complex, Knowledge Centre, Research Centre Complex, Technology Incubation Park, Department Buildings, Hostels, Core Labs, Campus School, Health Care Centre.

Though it took a little longer to finalize the tender documents and appoint the consultants, with the strong support from JICA, the construction work has started in the year 2019. His excellency Mr. Kenji Hiramatsu, Ambassador India, Japan graced to had of the groundbreaking ceremony of the first phase of construction on 28th March 2019 (see the Picture). The second phase of construction started in August 2019. Prof. Fujino, Prof. Ohno, and Prof. Kawazoe visited the campus in November 2019 to oversee the construction works' progress and noted that the progress and the quality of construction were much higher than they anticipated. Prof. Ohno inspecting the products and materials used in the construction can be seen in the Picture. As we speak, the construction activities are going on in full swing, and it is expected to complete the construction activities by June 2023.



Picture: The groundbreaking ceremony of Package 3A works of IITH by H. E. Mr. Kenji Hiramatsu, Ambassador of Japan to India – 28 March 2019



Picture: Prof. Ohno inspecting the products and materials to be used in the construction – November 2019



Picture: Prof. Ohno inspecting the products and materials to be used in the construction – November 2019

I had an opportunity to interact with the Japanese counterparts on several occasions through the FRIENDSHIP program. I have active collaboration with Prof. Ikuo Towhata, Professor Emeritus, University of Tokyo, and Prof. Tatsuya Ishikawa, Professor, University of Hokkaido. As part of the collaboration, Prof. Towhata had offered a course on 'Advanced Geotechnical Earthquake Engineering' to IITH students during Jan-April, 2017. Later, Prof. Towhata had delivered a two-credit course on Geotechnical Earthquake Engineering under the GIAN program in December 2017.

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### **Theme: Sustainable Development**

program's **FRIENDSHIP** sustainable The development theme is looking at the environmental, structural, water resources, geotechnical and social aspects of sustainability. The following are the team members of this program.

IITH	Japan
Environmental Engineering Dr. Debraj Bhattacharyya, Aishwarya Pandey, Keerti Katam Dr. Asif Qureshi Dr. Preetha Chattarjee	Prof. Satoshi Soda Dr. Toshiyuki Shimizu Prof. Shinji Kaneko, Dr. Ayyoob Sharifi Dr. Yujiro Tokumitsu
Water Resources Dr. KBVN Phanindra Dr. N Seetha Dr. Sathish Regonda	Prof. Hiroshi Morita
Structural Engineering Prof. KVL Subramanyam Dr. Suriya Prakash Dr. Mahendra Madhavan	Prof. Fujino
Geotechnical Engineering Prof. Sireesh Saride Dr. B Umashankar Dr. B Munwar Basha	Prof. Fujimoto Prof. Fukagawa Prof. Towhata Prof. Hazarika Prof. Ishikawa
Social Sciences  Dr. Haripriya Narasimhan  Dr. Aalok Khandekar	Prof. Shinji Kaneko, Dr. Ayyoob Sharifi Dr. Yujiro Tokumitsu Dr. Gergely Mohacsi

Debraj Bhattacharyya actively is Dr. collaborating with Prof. Satoshi Soda and Dr. Shimizu, Ritsumeikan University, on 'Developing cost-effective biological decentralized domestic wastewater treatment system.' This project was funded through CKP. A joint symposium on Recent advances in sustainable waste and wastewater engineering was held at IITH.

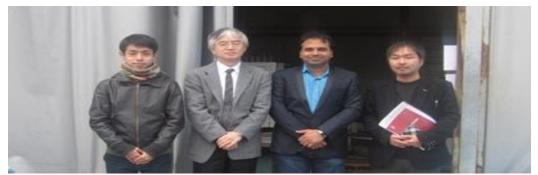




Picture: Prof. Soda and Prof. Shimizu at the joint symposium

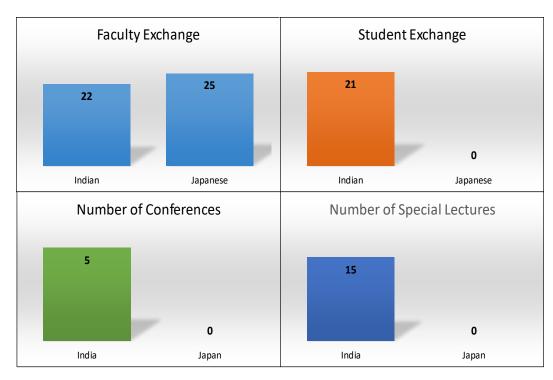
Under this collaboration, Dr. Munwar Basha and his students, Mr. Ravi Teja and Mr. Raghuram of Civil Engineering spent about three months at the Ritsumeikan University under JASSO program.





Picture: Mr. Raghuram and Dr. Munwar Basha at Ritsumeikan University

# The Sustainable Development program in a nutshell:



Brief Statistics of Sustainable Development Program with Japan

The sustainable development group has taken the initiation to invite more research students from Japan to IITH through joint supervision programs and collaboration projects.

