



Directorate of Outcome
Outcome Report
Event/Activity Organized @ AUH

1. **Event Type:** Workshop

Event Title: " Leadership: Creating Directions, Setting Goals, Defining Tasks "

Details of Speaker/Resource Person: Prof. Martina Horkova from TUKE, Slovakia

Date: 8/10/2018 to 12/10/2018

Venue: C-214

Organized by: ASET & ABS

Faculty Coordinator(s): Dr. Bhavana Adhikari and Dr. Vivek Jaglan

Participation: 25 (faculty)

- **Purpose of Event:** To Understand the position of leadership skills in personal skills' structure and the personality traits, behavioral patterns and skills of leader.

Point wise highlights of the Event:

- The role of leader's personality traits in his/her work.
- Typical behavioural patterns of good leaders.
- Leader's skill structure – improvement of cognitive, interpersonal, business and strategic skills.
- Application of techniques of self-presentation, active listening, speaking, observation, self-control, self-awareness
- Improvement of assertiveness, empathy, conflict management and work with personnel resources.
- Getting to know the basic strategies of goal setting.
- Improvement of planning, realizing and organizing of teamwork during goal attainment
- Identification of common problems in goal attainment – obstacles, coping, solutions
- Identification of basic leadership styles
- Comparing the teacher and leader/manager/coach

Outcome of the Event with Time Line (Proposed/Achieved)

(Provide suitable details wherever applicable)

1. Outcome related to Academia Connect		
a) Collaborations for Research Papers/Conference Papers/Book Chapter etc	Y/N	Y
b) Collaborations & MOU for Research Guidance [PhD, PG & UG (summer training, Dissertation)] & Projects/Use of Instruments etc.	Y/N	Y
c) Collaboration for Funded Projects.	Y/N	N
2. Outcome related to Industry Connect		

a) Placement	Y/N	N
b) Collaborations for Research Papers	Y/N	N
c) Collaborations & MOU for Research Guidance [PhD, PG & UG (summer training, Dissertation)] & Projects/Use of Instruments.	Y/N	N
d) Collaboration for Funded Projects.	Y/N	N
3. Outcome related to Society Outreach		
a) Benefit to society in terms of Health & hygiene	Y/N	N
b) Benefit to society in terms of Education	Y/N	Y
4. Outcome related to Students Learning & Grooming		
The training will cover the variety of topics connected with assessment and grading, including: To understand the position of leadership skills in personal skills' structure and the personality traits, behavioral patterns and skills of leader.		
5. Any other		

Enclose event report along with glimpses of the event (Photographs)

Aim:- The main aims of the training is to understand the position of leadership skills in personal skills' structure and the personality traits, behavioral patterns and skills of leader.

Content:- The training will cover the variety of topics connected with leadership skills in personal skills' structure and the personality traits including:

- The role of leader's personality traits in his/her work.
- Typical behavioural patterns of good leaders.
- Leader's skill structure – improvement of cognitive, interpersonal, business and strategic skills.
- Application of techniques of self-presentation, active listening, speaking, observation, self-control, self-awareness
- Improvement of assertiveness, empathy, conflict management and work with personnel resources.
- Getting to know the basic strategies of goal setting.
- Improvement of planning, realizing and organizing of teamwork during goal attainment
- Identification of common problems in goal attainment – obstacles, coping, solutions
- Identification of basic leadership styles
- Comparing the teacher and leader/manager/coach

Methodology:- The trainings will be delivered in two parts. First part through e-learning – which will be aimed at delivering knowledge concerning all listed subjects. Second part through workshops that will encourage interaction, discussion, group work, reflection, and localization to participants' needs and context.

Period of activity:

- Group 1--- 8/10/2018 to 9 /10/2018
- Group 2---11/10/2018 to 12 /10/2018

Participating Universities:

- TUKE, Slovakia
- Amity University Haryana, India

Participants No :- 25

Glimpses of the event:-







Japan-Asia Youth Exchange Program in Science
SAKURA Exchange Program in Science

Comprehensive Report



AMITY
UNIVERSITY

Gurugram, Haryana, India



Teikyo University

Utsunomiya Campus, Japan

Contents:

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1. About the Program
2. Brief about Day wise Activities
3. Student Projects
4. Individual Experiences
5. Conclusion

Glimpses of the Program

Program:

Japan- Sakura Exchange Program in Science, Asia Youth Exchange Program in Science

Duration:

08 Oct. 2018 – 14 Oct. 2018

Funded by:

Japan Science & Technology Agency

Conducted at:

Teikyo University, Utsunomiya Campus, Japan

Project Supervisors:

Prof.(Dr.) Masayuki Arai, Department of Information & Electronic Engineering

Prof.(Dr.) Kazutoshi Mori, Department Mechanical and Precision Systems Engineering

Prof.(Dr.) Tomoko Shinomura, Department of Biosciences

Participants from Amity University Haryana, India:

Dr. Sunil Sikka, Associate Professor, Deptt. of Computer Science Engineering

Mr. Piyush Raj, Student, B.Tech.- Computer Science Engineering

Ms. Ashu Rana, Student, B.Tech.- Computer Science Engineering

Mr. Tanuj Kumar Thakur, Student, B.Tech.- Mechanical Engineering

Mr. Vikram Kumar Saini, Student, B.Tech. -Aerospace Engineering

Ms. Gorantla Sai Susmita, Student, B.Tech. - Biotech Engineering

Ms. Mini Agrawal, Student, B.Tech. - Biotech Engineering

Acknowledgement

The time we spent in Japan to attend Sakura Exchange Program in Science-2018 at Teikyo University, Utsunomiya Campus from 8th October 2018 to 14th October 2018 is memorable for us as it was rich in experience sharing and helped us to discover our potential in terms of knowledge and growth. We have had so many rich experiences and opportunities that we believe will forever shape and influence our professional life while fostering personal growth and development.

We would like to give our profound thanks to Amity University Haryana who gave us this opportunity and life long experience. We are fortunate enough to get constant encouragement, support and guidance from Amity University Haryana which helped us in successfully completing of our seven days long international program.

The success and final outcome of this project required a lot of guidance and assistance from many people and we are extremely privileged to have got this all along this program. All that we have done is only due to such supervision and assistance and we would not forget to thank them.

We express our sincere thanks to our Hon'ble Founder Sir Dr. A.K. Chauhan and Chancellor Sir Dr. Aseem Chauhan for their guidance and encouragement to attend this program.

We indeed feel blessed under the mentorship of Hon'ble Vice Chancellor Sir Prof. (Dr.) P.B.Sharma and Pro-Vice Chancellor Ma'am Prof. (Dr.) Padmakali Banerjee. Their motivation and all valuable guidance always been helpful to us.

We owe our deep gratitude to Dr. Gunjan M.Sanjeev Vice President-RBEF (Amity Group) Director – International Affairs, for providing us the opportunity to join this program and providing us all the necessary information and guidance.

We would not forget to remember Teikyo University who welcomed us with open heart and more over for their timely support and guidance till the completion of this program. Special thanks to Professor Masayuki Arai, Professor Kazutoshi Mori and Professor Tomoko Shinomura who allowed us to work in their labs.

We also want to thank research scholars and students namely Tran Duy Linh, Harsha, Louis Budi, Do Tan Day, Christian Ivy, Vo Hoang Sang, Youuya Kawata, Hiroki Iwai, Takanashi Shunpei and Masui Nagi for supporting us in the lab.

Finally, we heartily thank all International Deptt. members namely Mr. Bhupender Sharma, Amity University Haryana, Ms Takako Okubo and Mr. Akira Kamata, Teikyo University, without whom help this program would not have executed successfully.

1. About the Program

Sakura Exchange Program in Science was started by Japan Science and Technology Agency (JST) in 2014, Japan-Asia Youth Exchange Program in Science (nicknamed “SAKURA Exchange Program in Science” or SSP) aims to invite excellent youth from Asian countries to Japan for a short period to allow them to discover Japan's state-of-the-art science and technology (S&T) and participate in exchanges with Japanese talent at universities and research institutions for the bilateral transfer of human resources and research. Young participants are expected to become future science leaders in Asia and their networks are also expected to grow.

“Japan-Asia Youth Exchange Program in Science” is the program for enhancing exchanges between Asia and Japan of the youths who will play a crucial role in the future field of

science and technology through the close collaboration of industry-academia-government by facilitating short-term visits of competent Asian youths to Japan. This program aims at raising the interest of Asian youths toward the leading Japanese science and technologies at Japanese universities, research institutions and private companies.

Seven members including six students and one faculty member were selected from Amity University Haryana, India to join Sakura Exchange Program in Science-2018 at Teikyo University, Utsunomiya Campus, Japan.

The schedule of the Program was as under:

Date	Time		Item / Action	Place
	8:45		Arriving in Japan	AI306
8 Mon	12:45	15:00	Orientation/ Lunch	Chisan Hotel, Utsunomiya
	15:00		Check in	
9 Tue	9:20		Gathering at the front desk	Chisan Hotel, Utsunomiya
	9:36	10:01	Transfer by bus	Utsunomiya Campus
	10:05	11:00	Guidance	
	11:05	12:00	Welcome Lunch Prof.Shinomura	Cafeteria
	13:30	14:15	Campus tour	Hunger, Botanical Lab, Library
	14:15	17:00	Study in laboratory	
	17:30	17:50	Transfer by bus	Chisan Hotel, Utsunomiya
10 Wed	8:25		Gathering at the front desk	Chisan Hotel, Utsunomiya
	8:28	8:59	Transfer by bus	Utsunomiya Campus
	9:05	17:00	Class	
	17:30	17:50	Transfer by bus	Chisan Hotel, Utsunomiya
11, Thu	8:00		Gathering at the front desk	Chisan Hotel, Utsunomiya
	8:30	9:30	Transfer by bus	
	9:30	12:00	Mitsubishi-Fuso Bus&Track Co.	
	13:00	13:45	Lunch	Asaya Rest House
	13:45	15:30	Trip to Nikko Toshogu-shrine	
		17:00	Transfer by bus	Chisan Hotel, Utsunomiya
12, Fri.	8:20		Gathering at front desk	Chisan Hotel, Utsunomiya
	8:30	8:50	Transfer by bus	Utsunomiya Campus

	9:00	16:00	Making Summery	
	16:00	17:30	Presentation	
	17:30	18:30	Farewell party	Mess
	18:30	19:00	Transfer by bus	Chisan Hotel Ustunomiya
13, Sat.	8:00		Check out	Chisan Hotel Ustunomiya
	8:32	10::00	Transfer by Shinkansen to Local tr.	Utsunomiya to Tokyo, to Kanda Olympic Kanda Hotel
	10:00	10:30	Transfer by Metro	Olympic Kanda Hotel,
	10:30	15:00	Science Musium	Lunch
	15:00	18:00	Sight Seeing Tokyo	Akihabara
	18:00	19:00	Night Meal	
	19:30	19:32	Transfer by Metro	
	19:40		Arrive hotel	Olympic Kanda Hotel
14, Sun.	6:20		Check out hotel, start to move	
	6:40	6:45	Transfer by JR	Tokyo Station Yaesu North Gate
	7:10	8:30	Transfer by T-Cat Bus	Narita Airport
		11:15	Bound to India -Terminal-2 AI307	

2. Brief about day wise activities

Day-1: Arrival in Japan (8th Oct. 2018)

We started to Japan on 7th Oct. 2018 at 9:15PM in Air India flight number is AI306. Our airplane landed on Narita International Airport, Japan at 09:00AM (8th Oct. 2018). After we all got our luggage we came out of the airport and an airport agent appointed by Teikyo University was waiting for us there. She brought bus ticket for us whose departure time was 09:55AM from the Narita International Airport. We reached Chisun Hotel, Utsunomia our destination at 12:25PM. Ms. Okubo Takako welcomed us there and conducted a small orientation. She told us more about Japan Science and Technology Agency and provides bus allowances and food allowances, and medical insurance. She also briefed about the transportation system of Utsunomiya. We checked-in Chisun hotel and Ms. Takako left at 03:00PM.

Day-2: Tour of Teikyo University (9th Oct. 2018)

After the breakfast at hotel we started at 9:20AM for Teikyo University. Ms. Takako was with us to guide. We reached at Teikyo University 10:00AM. There we met Mr. Akira Kamata, Coordinator International Department. He welcomed us all at Teikyo University and briefed about Teikyo University and provided us with University's guidebook. We also shared about our Amity University. After that we had lunch with Prof. Shinomura and then

moved for lab visits with Mr. Kamata. First we went Aerospace Lab where we took a closer look of aircrafts placed there. Then we visited to Biosciences Department, there we saw different labs in which they carry their experiments. After this we went to Mechanical Department, where Prof. Mori brief about his Engine Lab and also introduced his research scholars. Then we went to IT Department, we first visited Multimedia Lab, there we experienced virtual reality multimedia. Then we went to Prof. Arai Lab of Image Processing there Prof. Arai welcomed us and introduced his research scholars.

After the lab visits we were divided into three groups- IT, Mechanical and Bioscience and each group moved to respective labs for classes. Quickly classes were started with brief introduction of each. We all ended up by 6:00PM in evening except the boys from mechanical department stayed there as Prof. Mori wanted them to do some more work in labs. Prof. Mori arranged a welcome dinner for Mechanical students and after the dinner dropped them back to hotel.

Day-3: Classes & Faculty Presentations (10th Oct. 2018)

Complete day three was dedicated to classes. Each group did their experiments in respective labs. Prof. Arai organized a presentation and interaction session among Dr. Sunil Sikka and various faculty members of IT Deptt. of Teikyo University. During the session research interests were shared. Students did not attend this session as they were busy in their classes.

Dr. Sikka also attended a dinner with Dean, Director, Senior Professors and International Deptt. where options for further collaborations were discussed to strengthen the relationship among Amity University and Teikyo University.

Day 4: Industrial Visit to Mitsubishi-Fuso (11th Oct. 2018)

Forth day we started at 8:30AM for an industrial visit to R&D centre of Mitsubishi-Fuso. Prof. Mori, Mr. Kamata and Ms. Takato and few students from Teikyo University accompanied us. After reaching the Fuso R&D centre first we were introduced about the company and its products through a presentation. We were also explained about the testing facilities available in the centre.

After the presentation we experienced the live test ride of their bus up to 45 degree angle tilted and 120 km/h speed on various types to roads as per international standards. After this thrilling experience we were taken to radio anechoic laboratory. The engineers were testing a truck's electronics in this lab to understand the impact of external signals on vehicle's electronics. In engine testing laboratory we saw the engine noise testing room, durability testing, and engine exhaust emissions testing.

After visiting all these labs we were taken back to conference hall where Q&A session was held. Some engineers including the head of this R&D facility answered our questions. Also Fuso upcoming technologies were discussed.

From Fuso we were taken to Nikko-Toshugu, oldest shrines of Japan. There we come to know more about the traditional culture of Japan. At 7:00 PM we returned back to our hotel.

Day 5: Project Presentations and Farewell (12th Oct. 2018)

Fifth day students made their presentations from 9:00AM to 4:00PM under the guidance of respective supervisors and trainers. While students were preparing their presentations Dr. Sikka visited two Robotics labs where students and faculty members demonstrated their robotic projects. Prof. Mori and Ms. Takako conducted that lab visits.

The presentation session started with the small Address of Mr. Tsutomu Haeno, Dean, Teikyo University. Many senior professors, faculty members and students were presented in this session. Each group delivered a detailed presentation which includes their Experiments and Results. During the Q/A session lots of questions were asked by the audience. The presentations were appreciated by all. Each student also shared his/her experience at Teikyo University and delivered his/her acknowledgments. At the end of presentation session we were awarded with participation certificate.

After the presentations all moved to International Centre where a nice farewell party was organized for us. On behalf of Amity University Dr. Sikka expressed his vote of thanks and then the Program was declared closed.

Day 6: Tokyo Excursion (13th Oct. 2018)

Day six was an excursion day. That day Dr. Arai his wife and daughters, Mr. Kamata and a Mechanical department student Mr. Louis Budi accompanied us. We travelled from Utsunomiya to Tokyo via Bullet train and also experienced local train system of Japan.

In Tokyo we visited to Science Museum, Senso-ji, an ancient Buddhist temple in Asakusa and Yodobashi, an electronic market in Akihabara. Dr. Aria's daughters guided us during whole day. After a full day excursion we had a dinner in a vegan restaurant and checked-in our hotel Olympic Inn at around 9:30 PM.

Day 7: Return back (14th Oct. 2018)

On 14th Oct. morning Mr. Kamata and Mr. Louis see off us at Narita International Airport, Japan and at 5:30PM we returned back to Indira Gandhi International Airport, India. Then we

all moved to our homes. All of us returned back safely and in good health with lots of learning.

3. Students Projects

Project-1: Department of Mechanical and Precision System (Professor Mori lab.)

Aim: To evaluate engine performance and measure fuel consumption, exhaust emission and nanoparticles emitted from biodiesel fuel.

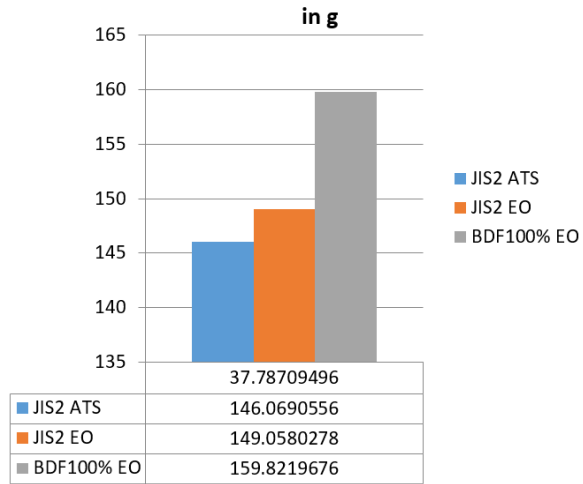
Lab Experiments: Professor Mori started with his presentation in which he made us understand the importance of biofuels and some data of PM level while comparing India and Japan. He introduces us to Louis Budi who helped us in giving a proper tour of the engine testing lab. In the lab, we met other members of mechanical Department who were fixing some problems of engine. Then we started with our experiments. They turned on the centrifugal pump which is used to throw the smoke out of the engine room. Everyone came inside the control room so we can start the engine. First of all we run the engine for certain amount of time (i.e. approximately 30 minutes) which was already fed in the system. This is done so that we could get the optimum amount of revolution per minute and make the coolant temperature go up to 80 C°. The whole experimental set up contains all kinds of sensors in order to measure certain parameters like engine rotation per minute, fuel temperature, intercooler temperature, etc so we can get all the readings on the screen without any harm. After the coolant temperature reaches to 80 C°, then we took the data of emissions from the engine. With the help of gas analyser we calibrated the Nitrogen oxides and Hydrocarbons from the exhaust gases. Before that we set a bolt in the exhaust pipe so we can take the samples of nanoparticles from it.

We compared engine performance with biodiesel and normal diesel. Exhaust emissions with after-treatment system and without it.

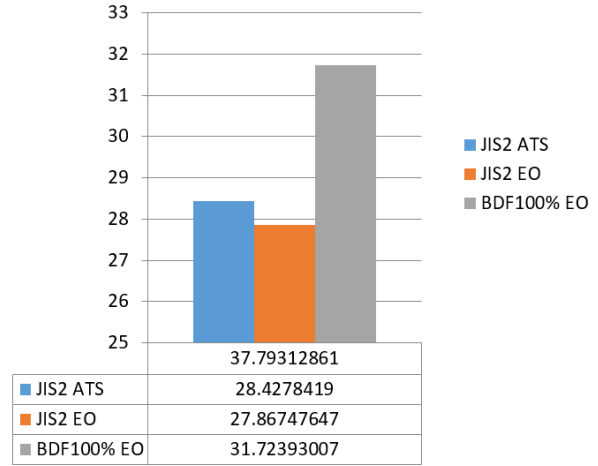
The next day we went to TEM lab to observe the samples under transmission electron microscope in bioscience lab. Also, we collected sample of engine exhaust soot on a bolt by inserting it inside exhaust pipe. We observed PM-Particles for biodiesel and normal diesel with different magnification and photographed all the particles we could find with our trainers Louis and Sang.

Results (Graphical Representation):

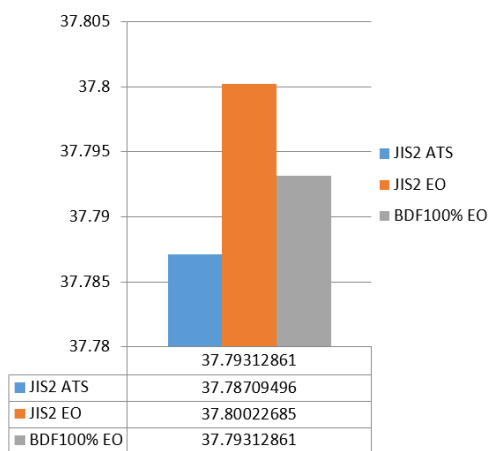
FUEL CONSUMPTION (Fuel Consumed in 50 s)



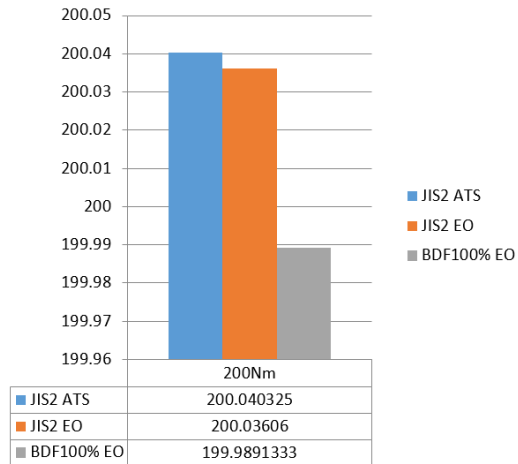
BRAKE THERMAL EFFICIENCY(%)



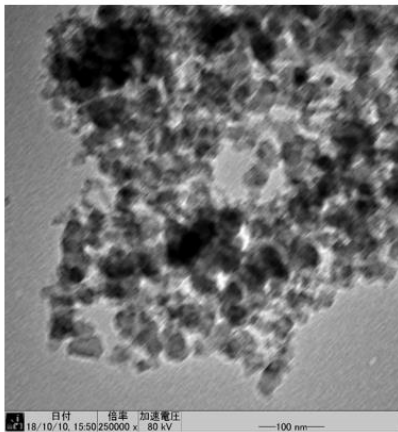
Power(KW)



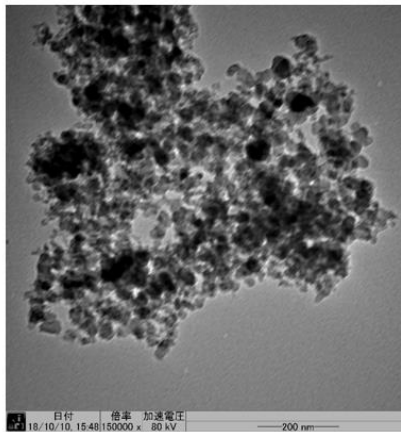
BRAKE TORQUE(Nm)



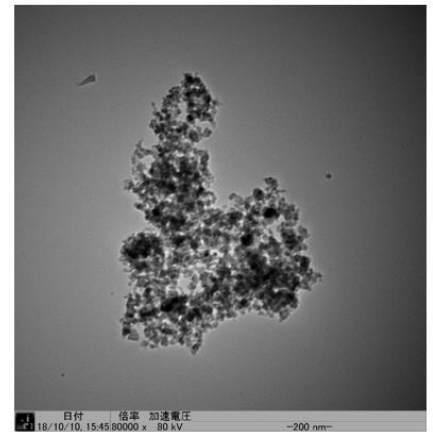
Engine Working with Normal Diesel



DIESEL ENGINE OUT 250k

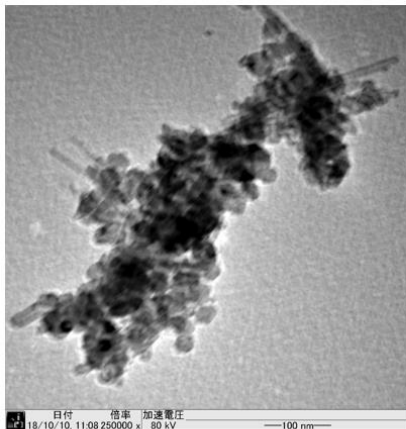


DIESEL ENGINE OUT 150k

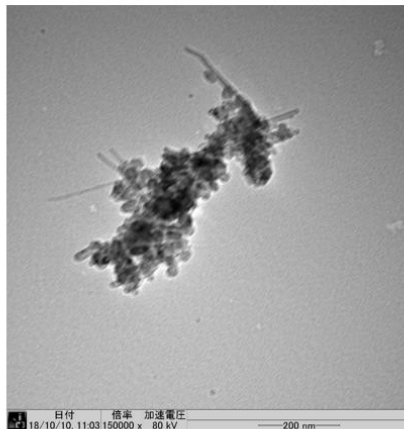


DIESEL ENGINE OUT 80k

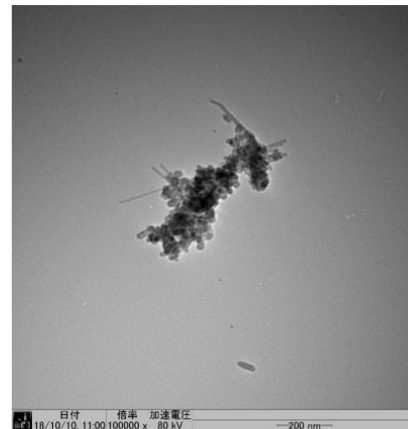
Engine Working with Biodiesel



BIODIESEL ENGINE OUT 250k

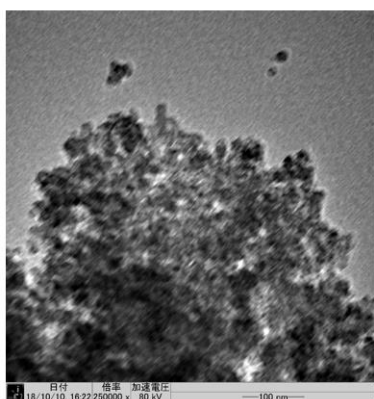


BIODIESEL ENGINE OUT 150k

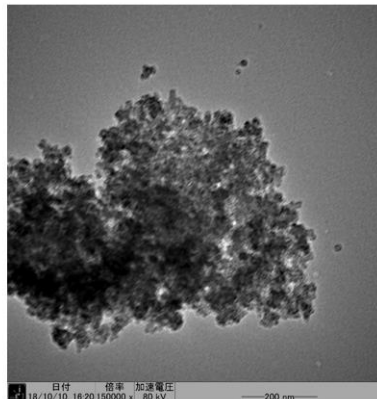


BIODIESEL ENGINE OUT 100k

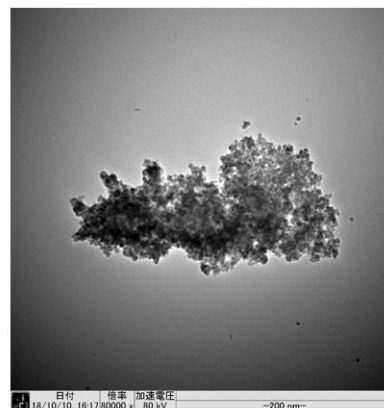
Engine working with diesel and After-Treatment System



DIESEL ENGINE OUT ATS 250k



DIESEL ENGINE OUT ATS 150k



DIESEL ENGINE OUT ATS 80k

Project-2: Department of Information and Electronic Engineering (Professor Arai Lab)

Aim: To build an object detection application using Deep learning API Tensorflow and OpenCV.

Experiments:

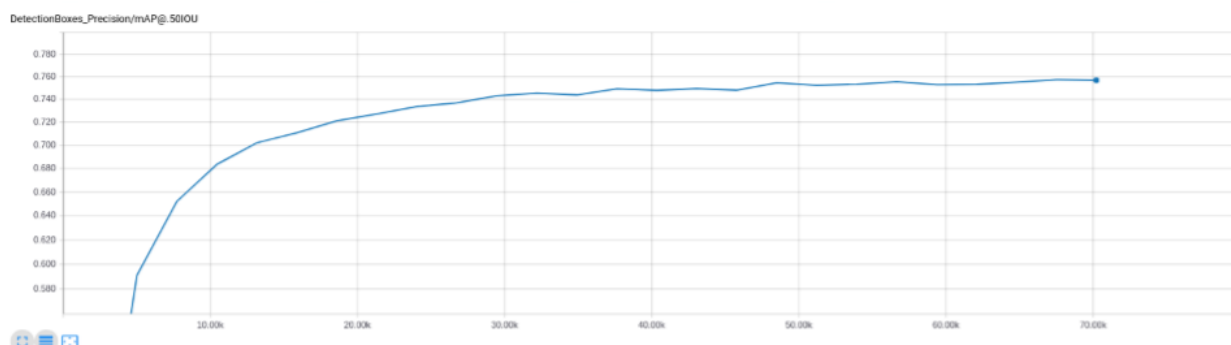
Project work started with a our brief introduction and all other presented namely Dr. Arai, PhD candidate Linh, Junior High School teacher Mr. Yoshitaka, Indonesia exchange student Jevist and Final year student in Computer Science Engineering Takuya Hoshi.

Our trainer Mr. Linh started with a presentation on image processing with Deep learning. He taught us available Datasets, Models and Artificial Neural Networks and how the API Tensorflow works, followed by the practical experiment.

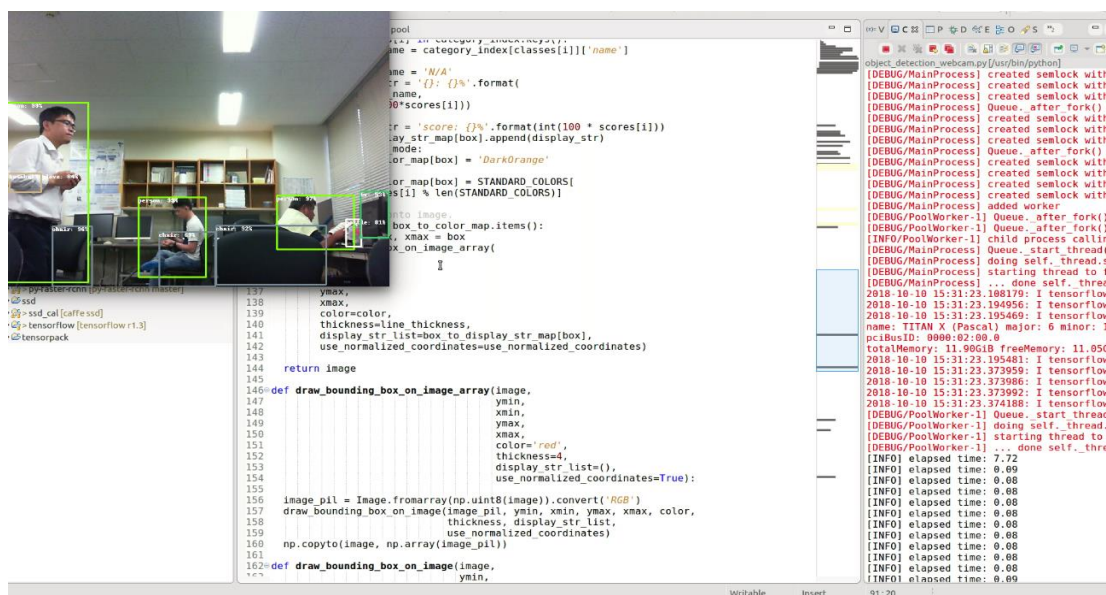
We trained a model named Faster R-CNN using Pascal VOC 2007 dataset. It took approximately one hour to complete 28000 steps which resulted in 34% confidence only. We left the machine under process overnight and found that the machine has completed 70000 steps the next day and the confidence reached to 99% which was amazing.

Next day we work on an application which can detect real time objects using webcam. We wrote a code to enclose the detected objects inside a rectangular box along with its label using Python Image Library (PIL).

Results:



Graph after 70000 steps



Final working object detection application

Proect-3: Department of Biosciences (Professor Shinomura Lab.)

Aim: Cell transformation using Particle Gun Method and visualization of transformed cells using Laser Confocal Microscopy.

Experiments: First we started off with preparations for the experiment. This included chopping of onion and removal of layers of endodermal cells from the underside of the onion slices. These cells were then layered in Petri-dishes containing a mixture of $\frac{1}{2}$ MS media + sucrose + 0.85 Agar. Then we prepared our DNA for bombardment by coating it on tungsten particles. For this, we first added DNA sample Plasmids pHT121 and pUC18 containing GFP and Citrine gene respectively (provided by the Teikyo University) in two separate eppendorf tubes and then adding in small amounts of tungsten particles and Spermidine and then mixing the whole solution thoroughly to evenly coat the particles with the DNA.

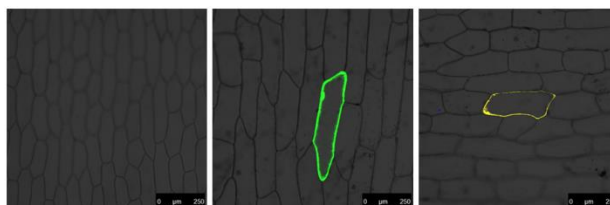
Then we took our samples to the particle gun set-up where we loaded our samples into the particle gun filter and after setting the parameters for the experiment, we bombarded the onion cells with the particles.

After this, we left our cell samples for recovery and incubation overnight under dark conditions and a temperature of 25 °C.

The next day we took our onion cells sample for visualization and identification of the transformed cells under laser confocal microscope.

This microscope works on the principle that every chemical entity absorbs energy at a certain wavelength and then emits it at another wavelength. The sensors are located just below the sample space and the energy source which is in the form of lasers is located directly above it. It has a set of different lasers which supply energy at specific individual wavelengths.

Results:



Control, GFP transformed cell, Citrine transformed cell

The transformed cells in our samples were identified from the green (GFP gene) and yellow (citrine gene) fluorescence they showed. Although the efficiency of the work was low but could be improved by more work.

4. Individual Experience



‘Insane’ or ‘Sugoi’ is the perfect word to share my experience in Japan. I’m ecstatic with how much I have achieved.

Before Visiting Japan:

- Never been on International plane by myself
- Never been to Japan
- Never realized value of time to this extent
- Did not know about Japanese culture

Throughout this program I have learnt more about myself and the world around me that I could never have in a classroom. I would recommend time abroad to absolutely everybody, as you gain precious memories, friendships and knowledge to last a lifetime. Sakura Exchange Program in Science has been an incredible experience for me. I have gained so much knowledge about Japan through my host-country and friends. The exposure has helped me become outgoing and more confident than before.

*"It's hard to believe I'm back and now I've been back at college and it's like I never left, although I'll never forget the amazing things I did and the lovely people I met. I learnt so much about people, different cultures and myself while I was over there. Every day I meet somebody new and they are always friendly and humble. I will not forget to mention the latest technology we worked upon under the guidance of Arai sensei. We built the object detection application using **Tensorflow** and **OpenCV**. We also trained a model that is **Faster R-CNN** using dataset **Pascal VOC 2007**.*

*Not only the technology or the project which I made but also the industrial visit to **Mitsubishi Fuso** and fun trip to **Nikko Shrine** in Utsonomiya, **Science museum**, **Akihabara Electronic Market** and **Senso-Ji** temple in Tokyo, every moment was amazing. I will cherish all the amazing experiences I've had!*

It really was the experience of a life time, I'm so glad I did it. Thankyou so much Amity University for everything!

(Ashu Rana)

*B-Tech CSE 4th year student
Amity University Haryana*



This science program is a milestone in my career. I am feeling so excited to pen down such beautiful experience of the Land of Rising sun. Starting from the beginning, the day when I got a call from Dr. Sikka sir for being selected in Sakura Exchange Program in Science, I was in the seventh heaven and from that day the journey had been so memorable.

The day we landed in the Narita International Airport, there the aura was so amazing that it doesn't seem to be real. The highlight of our arrival was the environment change we had there from India which made it so pleasant and lovable. Then we started moving ahead to our actual destination via bus, the landscapes, the weather, the environment and the people we encountered during this journey to our hotel were endearing. First night in Japan was so delightful and from that day my expectations started going high and high.

The Teikyo University was so scenic and beautiful. Working there under guidance of such renowned professors was the high point of this program. Working over there made me realize my arena of interest and future plans. I even played in their sports ground with Japanese students which was the worth memorable moment. Interacting with the people of different time zone made me realize how different could be this world. Faculty, Students and other employees there in Teikyo University were so helpful and they treated us like their family

members and tried to make every arrangement possible so that we could not be bothering with any difficulties.

Japanese culture was awe-inspiring and beautiful. There temples, shrines and the people worshipping were so amusing to look upon. Visiting Japan during Autumn Season was the advantage to our trip which made the entire voyage a lifetime achievement thing.

In short, The time I had spent in Japan was the best I had till now and I do believe it's just a beginning to my career and moreover I would be forever thankful to Amity University for giving me such a golden opportunity.

(Gorantla Sai Susmita)

B-Tech Biotech 4th year student
Amity University Haryana



It is my immense pleasure to share my experience of visiting Japan. During Japan-Asia Youth exchange Program in Science on October 8th – 14th, 2018 which was held by Teikyo University, Utsunomiya, Japan. This event gave me so many memories which are unforgettable. It was the first time I travelled by airplane and that also an international flight to Tokyo. During boarding, there was a big smile on my face, I was excited to sit in a plane and when our flight landed in Tokyo that was the best feeling ever. This program was flawless and perfect in every sense. I believe Sakura program is beneficial for students as it provides us better

knowledge about technology which can help students to change the future.

I gained lots of new experiences and following are my key learning during this visit:

- About the processing of Gas Analyser
- About Biofuels
- About Electron Laser Microscope
- About After Treatment System
- About Nanoparticles
- About the culture of Japan

This program gave the students knowledge of upcoming technology but I have also learned the life of Japanese that they like to be on-time, honesty, helping nature and perfect transportation system.

I would like to express my gratitude to Amity University for giving me the opportunity to be the part of Sakura Exchange Program in Science. I cannot thank my department enough for selecting me and letting me to take this whole new experience.

Hopefully someday I can visit to Japan again.

(Tanuj Kumar Thakur)

B-Tech ME 4th year student
Amity University Haryana



I would like to start off by saying that I feel incredibly grateful to Amity University and JST for providing me with such an amazing opportunity. I got to learn a lot from the professors at Teikyo University.

The first impression of Japan for me is that it is an incredibly beautiful country. People are really considerate and helpful and kind. This trip offered me a chance to learn some very important techniques frequently used which will be very helpful in my career progression.

I also got to witness the rich culture and heritage of the Japan, their spiritual and religious beliefs which hold its roots in India. Along with it, the technological progression that they have made was incredible to observe.

In a nutshell I really enjoyed my time there and would definitely like to visit again to learn further if the opportunity presents itself.

(Mini Agrawal)

B.Tech Biotech 4th year student
Amity University Haryana



As a student I never imagined such a trip will be offered to me while studying. But everything went well and I got the opportunity to attend Sakura Science Program in Teikyo University. There are many dimensions to my experience which include followings

- Knowledge of Japanese culture, food and landscape
- Understanding the extensive use of technology in human life
- Historical shrines and temples

- Modern research and development facility
- Network, bonding and love

Japanese culture values the individual. If you are a foreigner in Japan you will be overwhelmed by the respect Japanese show to you and one another. They thank everyone for every little favor. Showing gratitude is most fundamental aspect of human behavior. Japanese people understand this and they have accepted it in their culture.

Talking of Japanese food, it's the most delicious food I have ever had. I am not sure if the same experience applies to my Indian friends who went with me. But to me it was unarguably the best. Why I think so? Because Japanese food contains all the ingredients in right proportions required by human beings.

Japanese landscape has to be the best in the world because it's an island country, plenty of trees, water and rain is available all over the year. Japan has a lot of trees which are unarguably the best ornament for the earth. Above it Japanese houses are beautiful and clean. When you see Japanese colonies you start feeling jealous because we don't have such beautiful houses and parking systems.

There are many aspects to the use of technology. You don't need a conductor in bus. You don't need a man to provide tickets on station. You don't need to switch on the lights; your presence will switch on the lights. You don't need to flush in washroom. You don't need to open the gates they will automatically open by your presence in front of the gate.

History of Japan is very rich in terms of monuments and shrines. Japan has been ruled by Kings therefore it is expected to see castles.

Modern trucks and bus research and development facility of Fuso made me realize how an international engine maker functions.

I made new connections and relationships with Japanese, Indonesian, Chinese and Vietnamese students studying masters in Japan. I am blessed with the love of Professors.

(Vikram Kumar Saini)

B-Tech Aerospace 3rd year student



Firstly, I am really thankful to Amity University Haryana and JST to provide me this international opportunity. On this study tour I learnt a lot about latest technologies and also come to know lot about Japanese culture. Japan is a very beautiful country, everything is

well managed and organized. My stay at Japan was amazing. The professors and students from Teikyo University were so very friendly and helpful to us. The topic provided to me was interesting i.e. Image processing with Deep Learning.

My best experiences in Japan are listed below:-

- Learning about image processing using deep learning
- Japanese food on our farewell day
- Visit to Mitsubishi-Fuso R&D centre
- Travelling on bullet train for the first time

(Piyush Raj)

B-Tech CSE 3rd year student



It was really an outstanding experience to visit Japan for attending Sakura Exchange Program in Science. I am indeed thankful to Amity University Haryana for providing me the opportunity to travel Japan along with the six students. The entire program was funded by Japan Science and Technology Agency (JST) and very well conducted by Teikyo University, Utsunomia, Japan. During the whole program all

members of Teikyo University been very co-operative to me and my students. They spent their valuable time with us in sharing knowledge and discussion on the further research collaborations among Amity University and Teikyo University.

I had lots of good experiences in Japan which includes Teikyo University's Lab Visits, Working with Professors in Lab, Interaction with Faculty Members of Teikyo University, Discussion with Dean, Director, Senior Professors and International Deptt. of Teikyo University at Dinner, Mitsubishi-Fuso Industrial Visit, Nikko-Shrine Visit and Senso-Ji Buddha Temple Visit. These experiences not only enhanced my technical knowledge but also provided me the chance to know Japanese culture.

I am very glad by representing the Amity University at international platform.

(Dr. Sunil Sikka)

Associate Professor, Amity University Haryana

5. Conclusion

The time we spent in Japan was very memorable. We tried to explore each and every bit of Japan and tried our best to learn and to know the maximum. We have inculcated so many things from their culture and behavior which will help us to sharpen our personality and will always be the out- shining part of our career.

We have learnt so many things but the highlights are listed below:

- Punctuality, they taught us the value of time and how punctuality can make a huge difference in one's career.
- Discipline, it's a key of success. Following every rules and regulations will always uplifts the standard of your living.
- Mannerism, greeting everyone and wishing everyone good luck and helping those who are in need.
- Technology, the technology they use is so unique and nevertheless their technology is the world's upcoming future.
- Japanese Culture, we learnt the calmness with spirituality can be a deadly combination and will always take you ahead in your life.

During the interactions and meetings with Teikyo University regarding further collaborations with Amity University following points were highlighted.

- Teikyo University suggested us to send students for attending student exchange Program of 3-4 months. We requested Ms. Takako for sharing the detail regarding this program.
- Research interest of both the Universities can be shared so that accordingly worked out on collaborative projects.
- Combined research papers and research guidance could be another option for collaborative work.

We all enjoyed thoroughly this program and wish to attend more such programs if given a chance in future.

Lastly, we all would like to thank Amity University, Teikyo University and JST, for giving us the golden opportunity and making this the highlight of our career.

Glimpses of the Program



Orientation Program



Campus Tour with Mr. Akira Kamata (International Deptt. Coordinator, Teikyo University)



Aerospace Lab Visit



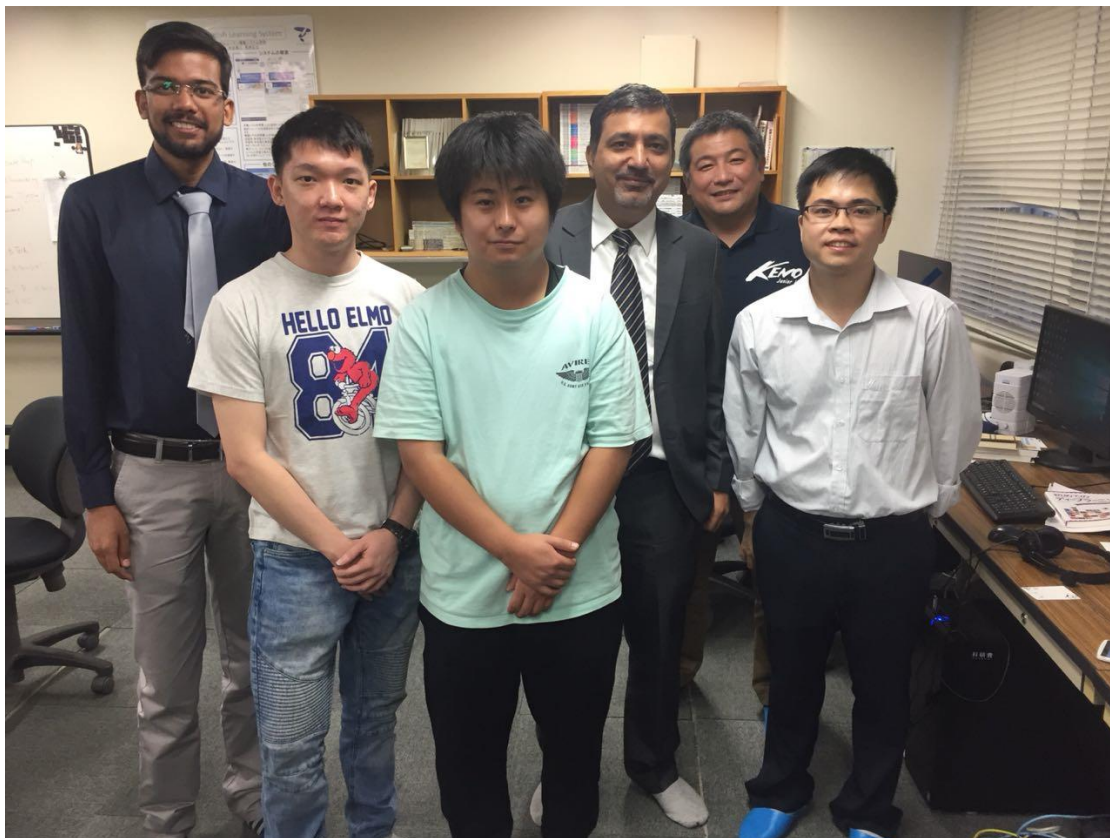
Multimedia Lab Visit



Prof. Mori Mechanical Lab Visit



Robotics Lab Visit



Prof. Arai Image Processing Lab Visit



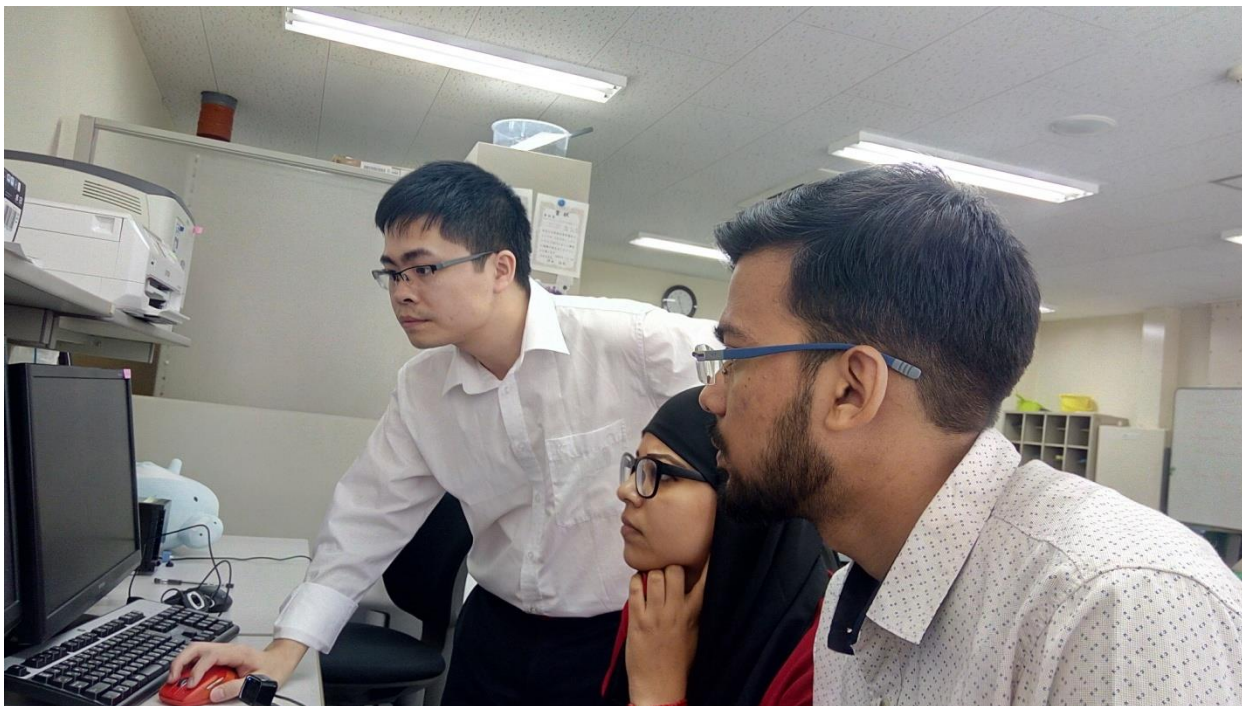
Faculty Interaction chaired by Prof. (Dr.) Masayuki Arai



Discussion at Dinner with Dean, Director, Senior Professors and International Deptt.



Mechanical Students working in Lab



Computer Science Students working in Lab



Students with Prof.(Dr.) Sninomura (Biosciences)



Industrial Visit to Mitsubishi-Fuso



Student Presentation



Student Presentation



Student Presentation



Farewell



Visit to Shrine