

# THE 3<sup>RD</sup> WINTER SCHOOL REPORT

## DECEMBER 6-21, 2017

### Overview:

The Joint Degree (JD) Program between Gifu University in cooperation with Indian Institute of Technology, Guwahati (IITG) and Universiti Kebangsaan Malaysia (UKM) is slated for opening in 2019. As a promotional activity of the JD Program, Gifu University set up the Winter School Program in 2015. The 2017 Winter School Program marks the third year. In this Program, outstanding students selected from IITG and UKM are invited to Gifu University to experience campus life for three weeks. The students take part in various activities such as research works at their respective supervisor's laboratories in the Faculty of Applied Biological Sciences and the Faculty of Engineering, introductory Japanese language lessons held at the International Student Center, and Japanese culture workshops. This program also offers the participants opportunities to gain some insights about Japanese industry by visiting local companies.



In the 1st Winter School 2015, eight students from IITG took part. In the 2nd Winter School 2016, participants from both IITG and UKM took part (six students from IITG and two students from UKM).

## 2017 WINTER SCHOOL PARTICIPANTS



**IITG: 5 STUDENTS**



**UKM: 2 STUDENTS**



## OPENING



### Arrival in Japan:

In the 3rd Winter School 2017 program, five students from IITG and two students from UKM arrived at Chubu International Centrair Airport, Nagoya on December 5. Despite a short delay in one of the flights, the Winter School participants appeared to be in good spirits for their first visit to Japan. Soon after lunch, they were taken to their accommodation on campus.



### Opening Ceremony:

In the following morning, an opening ceremony was held in Seminar Room 404, International Student Center to welcome the participants. After the opening speech by Dr. Fumiaki Suzuki, Supervisor of Winter School (Executive Director for International Affairs and Public Relations, Vice President of Gifu University), Associate Professor Raymond Go conducted an orientation and gave an overview of the program itinerary. Then, the participants introduced themselves in front of their supervisors.



### Welcome Party:

A welcome party took place in the same room right after the opening ceremony. A lunch buffet of vegetable and chicken curries, and Japanese sushi were prepared. Even though many of the participants tried raw fish for the first time, they did not seem to hesitate trying new food at all and enjoyed informal interactions with their supervisors and other professors of Gifu University.



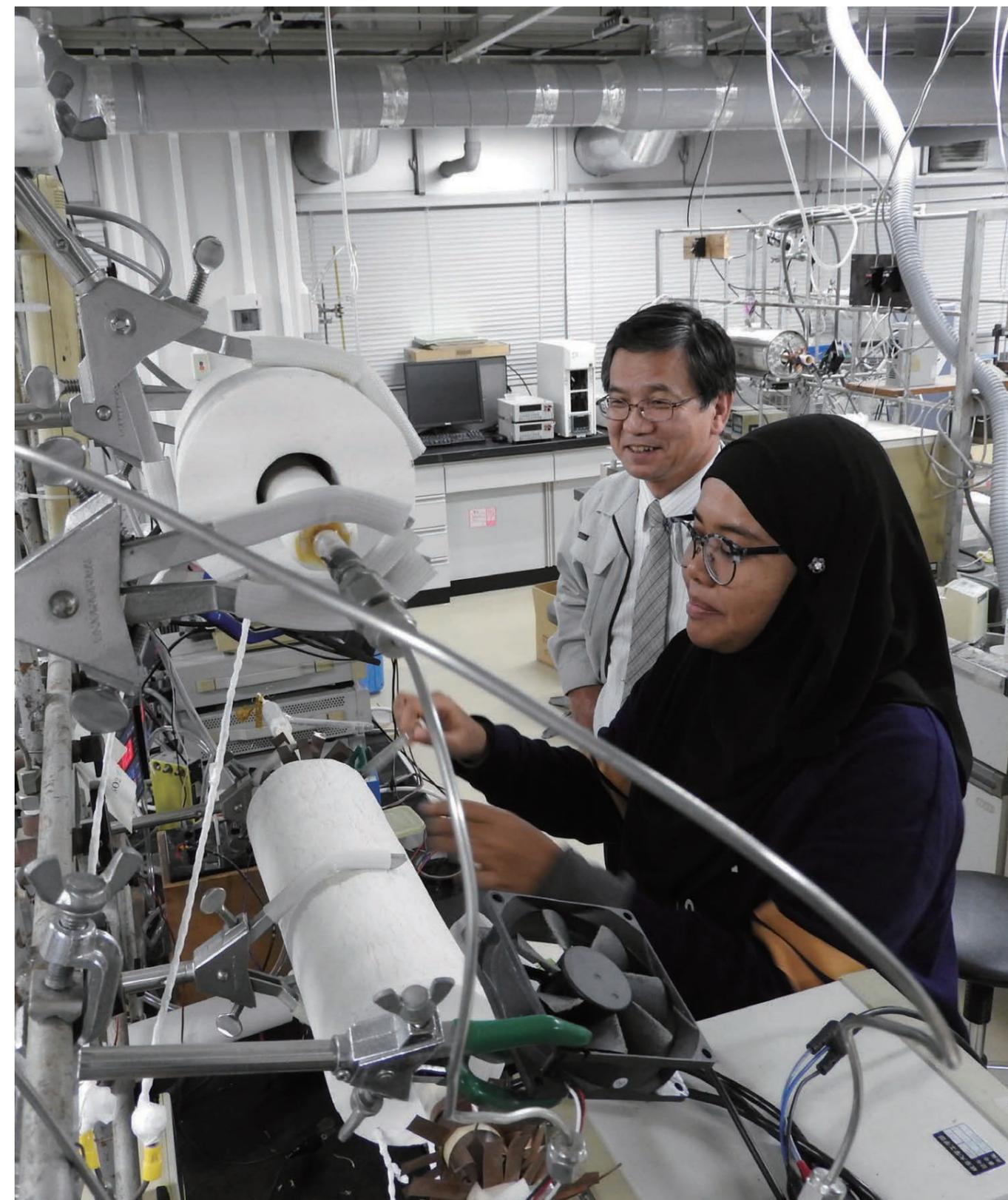
### Courtesy Call on the President:

After lunch, the participants and their supervisors paid a courtesy call to Dr. Hisataka Moriwaki, President of Gifu University. Although it was a brief thirty-minute meeting, they were able to give cordial exchanges about their universities and research themes.



### Healthcare Seminar:

After the courtesy call, the participants visited the Health Administration Center on campus. The Director of the Center, Dr. Mayumi Yamamoto led a healthcare seminar explaining national healthcare system of Japan, the role of the Center and healthcare activities offered to the students.



## LABORATORY WORK

During their stay, the participants engaged in laboratory work and carried out research activities under the instruction of their supervisors. Upon completion of their research, they each created a poster introducing what they have learned and summarizing the results of the experiments they conducted. Please refer to page 10 for the posters.

# JAPANESE CULTURE EXPERIENCES



## Survival Japanese Lessons:

Basic Japanese lessons were offered to the participants in the International Student Center (404 Seminar Room). The participants learned "Survival Japanese" over a total of nine-hour class sessions. They demonstrated what they have learned by presenting a short introductory speech in Japanese at the accomplishment report on December 21.



## Kendo Experience:

December 18, when the participants visited N-TECH Co., Ltd., situated in Yoro Town, Gifu Prefecture, the staff of N-TECH were kind enough to show the participants Kendo, Japanese fencing. The participants put on protective guard and were especially enthusiastic about Shinai bamboo sword for the first time.

## Ji-kabuki:

On December 10, during their visit to Nakatsugawa City, the participants had the opportunity to watch a local kabuki performance (Ji-kabuki). It is a traditional drama performance played by local amateurs. Before the performance, the participants received a short lecture about its history, the way to enjoy the drama, and highlight of the act they should watch out for. The kabuki play, "Kotobuki Sogano Taimen Kudouyamakata no Ba" was performed. They were fascinated by the dynamic and beautiful performance and colorful kimono worn by the actors.

## Kaiawase:

On December 12, the participants visited Tokugawa Art Museum, in Nagoya City, Aichi Prefecture. In the museum, they were given a short introduction of the history of the Tokugawa family, the museum and its important collections. Following that, they joined a workshop on kai-awase, a shell-matching game played in the 19th century. First, the participants were shown a display of beautiful shells colored with gold and silver, and decorated with traditional motifs. Second, they enjoyed the game of matching identical pairs of shells. Finally, they each decorated their own pair of kai-awase shells to bring home as souvenirs.



## Visit to Magome-juku:

On December 10, the participants toured Magome-juku, situated in Nakatsugawa City, Gifu Prefecture. Magome-juku was one of the ancient post-towns along Nakasendo way during the early Edo Period. This historic place has always attracted both Japanese and foreign tourists. The participants strolled through the cobblestone streets that characterize the town while taking pictures of traditional Japanese houses.



## Japanese Culture Experience/ JUNI-HITOE (layered kimono) -Japanese traditional costume:-

On December 13, the participants took part in a Japanese culture workshop organized by the International Student Center. The topic of the workshop was Juni-Hitoe (layered kimono) -Japanese traditional costume-. Juni-Hitoe, which weighs more than 10 kg, was officially worn by court ladies. The participants listened attentively to the lecture and witnessed a demonstration of one Gifu University international student being dressed up in layered kimonos. After the lecture, the participants had a chance to try it on themselves. This workshop offered the students a rich experience and glimpse into one of Japan's traditional cultural heritage.



# COMPANY TOURS



**Chicory Village:**

On December 10, the participants visited Chicory Village, in Nakatsugawa City. Chicory is a vegetable also known as endive and this company supplies the majority of chicory in Japan. The students toured the plant and observed the chicory production led by a staff. They were also given a taste of various dishes made from chicory in the restaurant next to the company.



**Toyota Kaikan Museum and Toyota Plant Tour:**

On December 12, the participants visited Toyota Kaikan Museum, in Toyota City, Aichi Prefecture. Needless to say, Toyota is a world-famous automaker, and there are many plants in this prefecture. The students toured the Toyota Kaikan Museum on their own before being led to a plant tour to inspect Toyota's innovative production process.



## N-TECH Co., Ltd.:

On December 18, the participants visited N-TECH Co., Ltd., located in Yoro Town, Gifu Prefecture. N-TECH manufactures machines that fabricate food containers. Employees made a company presentation and led them on a factory tour. The participants showed a keen interest in the effective automated production line that is designed to make food containers with stable high quality.



# SEMINARS



**Dr. Kannan Pakshirajan:**  
Dean, Faculty of Biosciences and Bioengineering  
Professor of Department of Biosciences and Bioengineering, IITG

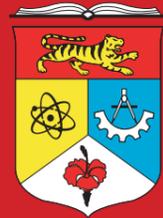
On December 19, Dr. Kannan Pakshirajan held a workshop on making posters for research presentation in the International Student Center (Seminar Room 404). Dr. Pakshirajan lectured on the important points in creating a poster presentation and provided the attendees helpful advice for creating their individual posters. Please refer to page 10 for the posters.

On the following day, Dr. Pakshirajan offered a seminar introducing his research work titled, "Bioprocessing strategies for production of biofuels and value addition of wastewater and waste sludge" held in the International Student Center (Seminar Room 404).



**Dr. Mohammad B. Kassim:**  
Dean, Faculty of Science and Technology  
Professor of Inorganic Chemistry/Deputy Executive Director of Strategy, UKM

On December 20, Dr. Mohammad B. Kassim conducted a seminar introducing his research work titled, "Recent progress in photo electrochemical water splitting" held in the International Student Center (Seminar Room 404).



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## Lectures on Traffic Safety and Crime Prevention:

On December 15, the participants attended Lectures on Traffic Safety and Crime Prevention held in Lecture Room No.35, General Education Building. Members of Gifu law enforcement officers spoke about traffic rules in Japan and security measures against crimes. They also mentioned the necessity to secure evacuation places in case of natural disasters.



# RICE BALL PROJECT



The 3<sup>rd</sup> Winter School program decided to implement the "Rice Ball (Onigiri) Project" with the aim to introduce the concept of design thinking and to promote intercultural understanding among participants from different cultures and religions.

On December 9, the participants received a lecture about an important Japanese staple, rice ball or "onigiri." Dietary problems that people from other countries face in Japan were also highlighted. Then, the participants were divided into three teams to think and create their own unique rice ball recipes to address the particular dietary tastes and preferences of members from different food cultures (Japanese, Indian, and Malaysian). Each group had to create their rice ball within a budget (JPY1, 000). Japanese and international students in Gifu University also joined the Winter School participants, working together to generate ideas and come up with a prototype. At the end of the seminar, each team made their unique onigiri samples. They also prepared a poster illustrating the ingredients used and the cooking procedures.



# RICE BALL PROJECT PRESENTATION



Team A  
Vegan Onigiri

Team B  
Pyramid Onigiri

Team C  
Karai Cheese Onigiri



On December 21, at the farewell party, the three teams prepared their team's rice ball samples and made a presentation on their recipes highlighting the distinct features of their rice balls in front of four juries, Dr. Kannan Pakshirajan, Dr. Mohammad B. Kassim, President Hisataka Moriwaki and Dr. Fumiaki Suzuki. The juries evaluated each team's rice balls in light of taste, appearance and originality. Based on these criteria, Team A which created the "Vegan Onigiri" gained the highest rating to win the grand price. The winning team members received small gifts from the President.

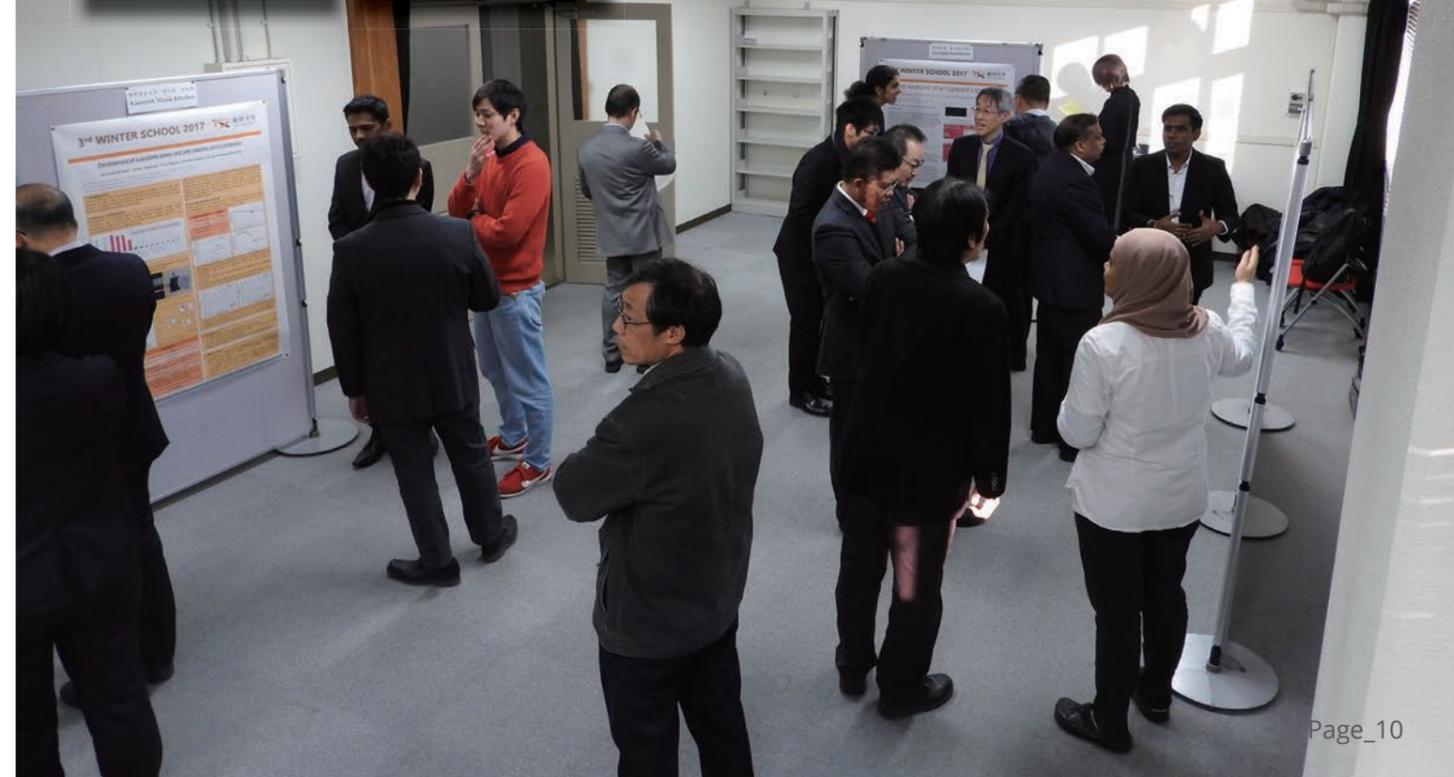
# ACCOMPLISHMENT REPORTS



On December 21, Accomplishment Reports were held in the International Student Center (Seminar Room 404). At the Accomplishment Report session, the participants delivered their own poster presentations introducing the research laboratory work they had accomplished during the program and prepared a one-minute speech in Japanese. The session was attended by Dr. Fumiaki Suzuki. Despite only three weeks or less for their research activities, the participants did their best and looked confident over their achievements.



Winter School Participants' Posters:  
The participants displayed their research work and results into posters. Clear figures and design were highly acclaimed among the supervisors.



# ENDING



## Closing Ceremony:

On December 21, the closing ceremony was held in Yanagido Kaikan. Dr. Fumiaki Suzuki gave a speech making brief comments on the participants' posters. Following his speech, he awarded the Certificate of Completion to each participant.

## Farewell Party:

After the closing ceremony, a farewell party was held in the same hall. President Hisataka Moriwaki was invited for this party and delivered a speech to the Winter School participants. After the speech, Dr. Fumiaki Suzuki made a toast. This farewell party was also joined by the Winter School tutors, laboratory members, supervisors, and other university staff. The party offered all the participants the final chance to mingle with each other in a friendly atmosphere. At the end of the party, two representative students from IITG and UKM commented on the Winter School and their campus life at Gifu University. Finally, Dr. Hiroyuki Koyama, Advisor to the President, made a closing remark to conclude the successful outcome of the 3<sup>rd</sup> Winter School program.



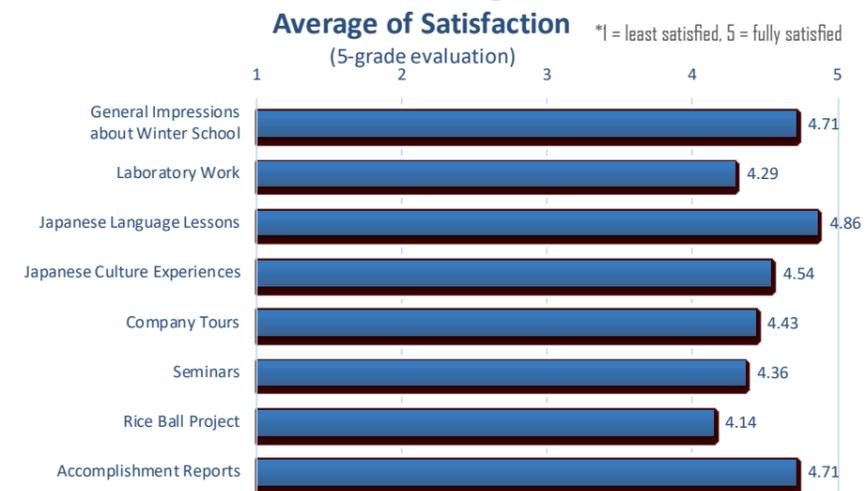
# QUESTIONNAIRE

## 1. Participants information

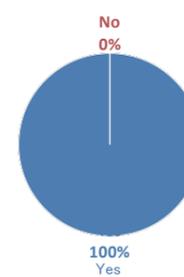
Males	3
Females	4
Average age	23 years old

Gifu University	IITG/UKM
Faculty of Applied Biological Sciences	Biosciences and Bioengineering
	Chemistry
	Biotechnology
Faculty of Engineering	Mechanical
	Physics
	Food Science/Technology
	Fuel Cell Engineering

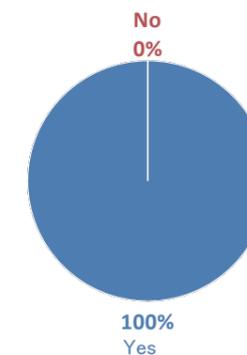
## 2. Satisfaction with the 3<sup>rd</sup> Winter School Program



Q. Would you recommend the Winter School Program to the people you know?



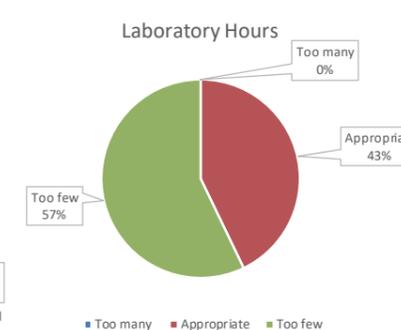
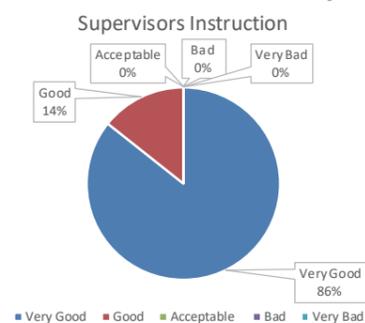
Q. Are you happy with overall arrangements of the program?



### Comments

- I experienced everything in Gifu, from doing research, living experience and the culture.
- Very well planned
- Language was a huge barrier. In the sense that it was difficult for everyone to interact even in normal English.
- This is well executed research and cultural programme showcasing the cultural heritage of Japan as well as exposing participants to research activities. The participants were highlighted with the several excursions/activities as well as laboratory works that exposed me with different insight on my research.

## 3. Satisfaction with Laboratory Work



### Comments

- The laboratory work that we did gave us a completely different exposure to the kind of research that is going on. However, due to all the activities that we had during the winter school, we didn't get to spend enough time in the laboratory.
- It was excellent. I have totally enjoyed my time in the laboratory with my supervisor and all the other students
- Language was a huge barrier. In the sense that it was difficult for everyone to interact even in normal English.
- Prof has been very supportive and has given me the freedom to pursue my projects/research without objection. He has also provided insightful discussions about the research. I am also very grateful to him for his scientific advice and knowledge and many insightful discussions and suggestions. Besides, all the lab members who always there whenever I asked for help.

# COMMENTS TO PARTICIPANTS



**Dr. Hisataka MORIWAKI**  
President, Gifu University

Excerpt from "Farewell Remarks to Gifu University Winter School Students" on December 21, 2017

On this occasion of the closing ceremony for Gifu University Winter School 2017, I would like to give some brief farewell remarks. In preparation for the start of joint degree programs in the year 2019 between Indian Institute of Technology, Guwahati, Universiti Kebangsaan Malaysia and Gifu University, we have initiated both the Summer School Program and Winter School Program. These programs are characterized by the exchange of students as well as instructors from participating institutions.

The Winter School program is an important stepping stone toward the goal of joint degree and, I believe, has gained a big success due particularly to the extremely high quality of students and also to the keen leadership of excellent teachers and support staff.

One of the most important objectives in this Program is early exposure to Japanese language, culture, and private sector companies. The program was carefully designed to provide you, the Winter School students a high motivation to return to Japan to pursue your academic career and study in the future joint degree programs.

I also hope that your brief time in Gifu University and Gifu City was comfortable and pleasant in every aspect. We would appreciate any comments to further improve our teaching facilities, living accommodations, and so on.

I am sincerely looking forward to seeing all of you again in the near future in Japan or in your respective countries at the next learning stage.



**From Professor Akio EBHARA**

Working at a new place with new people will provide a new dimension in your research. I hope that the experiences at Gifu University encouraged you and inspired you to pursue a higher education in your career. Good luck with your future.



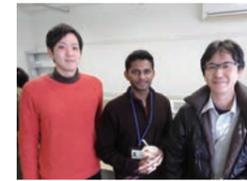
**From Professor Hideharu ISHIDA**

I was very happy to welcome you in our group and appreciate your great success in the synthesis of biologically important glycan. I hope you enjoyed the chemistry and the instrumental analysis. See you again in the near future.



**From Professor Hitashi IWAHASHI**

It was nice time for me to share the knowledge concerning nano-toxicology with you. We hope your experience in Winter School 2017 will contribute to your future work especially relating to Japan and science. Please keep in touch with us and hope for our efforts coming to fruition. See you again soon in Japan or India.



**From Professor Shuhei TAKAHASHI**

I hope you enjoyed the winter school and the laboratory work in Gifu University. It was a great experience for you and also for my laboratory's students. If you have another opportunity to come to Japan in the future, please visit us again.



**From Professor Daohong WANG**

I was happy for having the opportunity in supervising Ms. Aparajitha Karthikeyan who is very interested in lightning physics and also is very motivated in getting things done. During her stay in Gifu University, although I just gave her some brief instruction, she has accomplished much more than I expected. I hope she will continue the study of lightning physics and become a famous lightning scientist in India in the future.



**From Professor Yutaka OHYA**

To Ashikin: Your stay in our lab was very exciting for me and the students in our lab. But the period was too short to share time for new investigation about your study. If you have a chance to visit our lab again, you are always welcome and we can develop new investigation of your study. Finally, I wish your success in academic activities and the best of luck for your future.



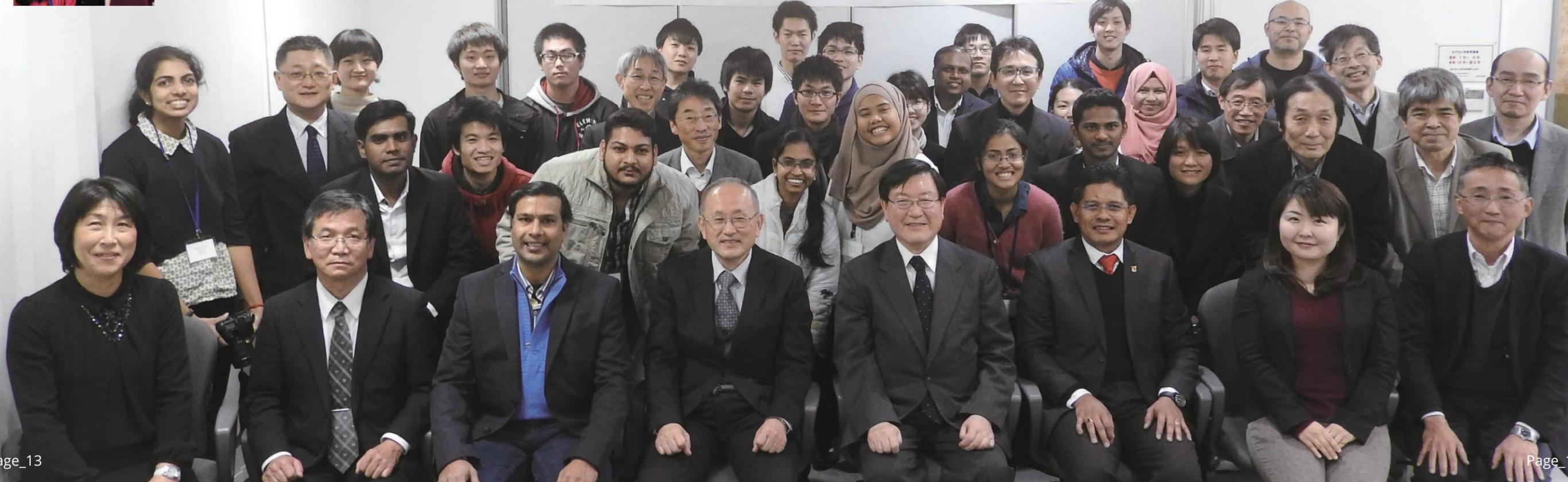
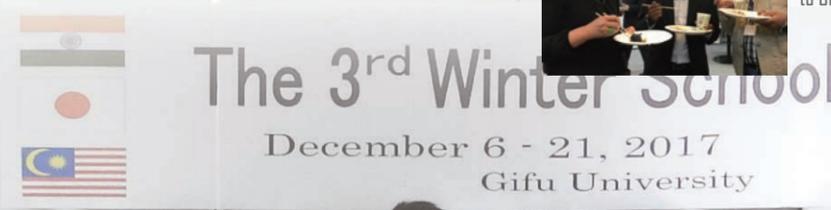
**From Professor Mamoru KOKETSU**

I am very glad to have Mr. Ramachandran Ravisangkar in our lab. His supervisor and I are carrying out the collaborative project now. His research results in Gifu are very promising. If he comes back again to Gifu, we can study deeper into the project. We will be able to achieve very interesting outcomes and an excellent achievement in our research.



**From Professor Mamoko TSUCHIYA**

Because of a tight schedule, we offered only six Japanese language classes this year. In spite of the limited study hours, your self-introductions in Japanese presented at the end of the program were splendid! We are proud of all of you. When you come back to Gifu University, we are very happy to give you a variety of Japanese language classes!





## COMMENTS FROM WINTER SCHOOL PARTICIPANTS

- Expectations before participating in Winter School:
  1. To gain an insight into what is happening in the field of lightning physics.
  2. To learn basic Japanese for primary communication.
  3. To visit the highlights of Japan's sightseeing spots.

My expectations were met pretty well. However, I wish that we had more time so that I could understand more concepts in lightning physics.
- I had both the cultural and academic experiences in GIFU university at the same time, which may help me for my higher studies. Arrangements regarding staying and traveling were very clear and awesome.
- JAPAN RESEARCH STYLE WILL BE VERY HANDS-ON AND THE KNOWLEDGE IS VERY DEEP FOR THE SPECIFIC FIELD AFTER: I EXPERIENCED DOING EVERYTHING IN LAB. IN MALAYSIA WE SEND THE SAMPLES TO SEM AND TEM ANALYSIS AND WAIT FOR THE RESULT BUT HERE ALL ANALYSIS ARE CARRIED OUT BY THE RESEARCHER THEMSELVES.
- In the Winter School schedule we have Japanese language classes, KABUKI show and some very interesting outings which gave me the exposure of Japanese culture. and the most important thing the laboratory was excellent and my professor and the other students were so humble and kind to help me in any difficulties during lab work. It was an excellent experience of me personally.
- I WOULD RECOMMEND THE WINTER SCHOOL TO ALL MY JUNIORS. IT IS A VERY GOOD MEDIUM TO LEARN THE JAPANESE CULTURE. YOU WOULD GET GOOD RESEARCH EXPOSURE IN WELL EQUIPPED LABORATORIES. VERY GOOD EXPERIENCE FOR ME. BUT JAPAN IS VERY EXPENSIVE DUE TO ITS HIGH COST OF LIVING.
- Winter School program was a great and eye-opening experience. Although it is a short program, there are a lot of things and lesson that I have learned and I can apply them back in my research and my life.
  1. I have achieved almost all my intended research milestone
  2. Establish good relationship with my Supervisor
  3. Found a good scope that I can focus on during my PhD
  4. Have wonderful Japanese cultural experience and activity
  5. Visited huge Japanese companies and experienced the working environment and culture
- Somehow my expectations were met. I was not satisfied with the lab hours provided as two and half week was too short for my work to be fully completed.

### In cooperation with :

Faculty members from Applied Biological Sciences and Engineering, International Student Center, Health Administration Center, N-TECH Co.,Ltd., Chicory Village and TOYOTA



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