## Taiwan Tech Summer Program Report

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1. What was your most impressive event (lecture, factory visit and cultural program etc.) in this summer program?

My most impressive event is GARMIN visit. GARMIN is GPS hardware manufacture companies. It recently attracted attention about manufacturing watch type wearable terminal that able to make payment (Fig. 1). I think to work at manufacturer in the future. So this is good opportunity to know manufacturer.

GARMIN manufacture products that focus on outdoor.
GARMIN conduct some tests about shock resistance and



Fig. 1 GARMIN products.

battery run and look like confident of battery run time. Whereas GARMIN's Battery run time is 1 week, Apple watch's battery run time is 8 hours. We looked on fabricating lab. Products were lined up on the table and put touch panel there though factory. It has frequently told students and clients about themselves or their products. Factory is separated every operation. The operations are so simple and sensitive that it is automation in order to prevent from putting out defective product. Data of employs' information such as a work time and number of product one day are visualized. This was such a movie. These data is used to calculate efficiency of product. It might be feel to treat in such robot. But employs can be refresh at gym. They can play basketball, table tennis and billiard. I could see some attempts for manufacturing good products and good work environment.

We don't only look on lab in this visit. In the future most of us work in chemical maker, and increase to have opportunity to explain its products and my study to people who don't know chemistry at all. Improvement in the ability to make a presentation lead to get client to understand my study or products. GARMIN give a presentation what is presentation and sale to us who will have some techniques and work at manufacturer. I learned about importance of searching what client don't know, sale's goal and presentation's goal. I care too whether presentation fail or not, although I didn't understand about what is fail in presentation. My presentation's goal is being understood about my study. I realize I have to make a presentation while I specifically care about why study my theme and what reason of the experimental conditions.

2. What did you learn from this summer program? If possible, please describe how to make use of the experience you gained from this summer program in the future.

Primarily, I discussed about industrial problems with student of different department from this summer program. Now in regard to micro plastic, a lot of countries carry out ban of using plastic straw or bag. But researcher can approach this problem from a different angle. Bioplastic is a good example. Bioplastic is biodegradable plastic, but degradation of bioplastic take long time in nature. So it is not that people can litter. ULVAC employ said I have to think and take action this problem from now. Actuary I just learned industrial problem all the world and refrained to use plastic bag until I was high school student. Now I belong to laboratory that study polyimide and think we can use it wavelength convert film. Wavelength convert film is able to improve solar cell. Our study lead to solve energy problem. I'd like to conduct my study while keep in mind that almost people can't do this study.

For the first time I discussed some topics with foreign students. I told about some my thinking, but I couldn't talk about details. I have to talk about my study in English at conference in the future. So I have to train to improve my English skills. If I would see to Taiwanese friends, I will try to talk about my study detail to them.

## 3. Your frank impression (opinion) of this summer program.

In this program my purpose is improvement of my English skill. Of cause, in general English skill does not improve for ten days. But this program is good opportunity to me. I was able to comprehend the pleasure to talk in English. When I discussed in a class, I realize not enough of my English skills. But during lunch time and after the class I enjoyed conversation. I think I enjoyed because of Taiwan. Taiwanese is friendly toward Japan than had heard. Taiwanese students asked me a lot of questions about Japanese animation and trip in Japan. So I comprehend again that they are interested in Japan. And they also ask me how to think self-defense forces. They are not only interested in japan but also think seriously relationship between Taiwan and japan. These day import duty and nuclear are becoming a problem for society. That's why we also think seriously not only industrial problem but also relationship between some countries and japan.