

(For JSPS Fellow)

Form B-5

Date (日付)

26日6月2014年 (Date/Month/Year: 日/月/年)

**Activity Report -Science Dialogue Program-**  
(サイエンス・ダイアログ事業 実施報告書)

- Fellow's name (講師氏名): Adriana Ledezma Estrada (ID No. P 13046)
- Participating school (学校名): 富山県立富山高等学校 (Toyama Prefectural Toyama High School)
- Date (実施日時): 18日6月2014年 (Date/Month/Year: 日/月/年)
- Lecture title (講演題目): (in English) PPCPs in water  
(in Japanese)
- Lecture summary (講演概要): Please summary your lecture 200-500 words.

My lecture was prepared considering the requirements of the school, such as get the students interested on science, cutting-edge research activities, or English as tool for science. During my lecture I spoke in both English and Japanese while my presentation was written in English. To make easier and more dynamic my presentation I divided it into 3 sections: Self introduction, what is science, and my research, which I split into introduction and experiments. Every time that I finished a section we had a brief Q & A. At the end we have a longer time for Q & A and discussion about other related topics.

I started my lecture with myself introduction, I talked about my academic history and work experience. Then, I mentioned my hobbies and the things I like or I am interested in. It was to gave them the idea of what is like to be a scientific researcher. Also, I introduced my country and the educational system to further compare some data with Japan. Finally, I mentioned since when and how I came to study and work in Japan.

During the second section, I explained what is science and its fundamentals, like the scientific method, the importance of English as a communication tool that allows you to know what other scientist are doing and to share your findings and how all this promotes the improvement or correction of science.

Finally, I talked about my research, the removal of antibiotics from wastewater by electrochemical methods. First, I explained the importance of water, its availability now and in the future around the world as well of the relationship with the population growth. Then, I explained about one kind of pollutants the PPCPs (Pharmaceutical and Personal Care Products), like the antibiotics. About them I explained their characteristics, sources, uses like in the pharming or agriculture and their environmental impact. Later on, I explained my research. I described my

experiment, explained the fundamentals, showed my results and discussed about them, and finally the availability of the implementation of this technology.

At the end we talked about Toyama city, which is famous for its water culture, it has been awarded as the second most delicious water in Japan, also they have a big pharmaceutical company and their rivers were polluted from mining years ago. So, they asked many questions and gave their opinion about this issues and got more interested not only in science but in water environment. At the end they asked us about Tohoku-Dai, and how to prepare for the entrance examination.

- Language used (使用言語): 40% Japanese; 60% English

- Lecture format (講演形式):

◆Lecture time (講演時間) 40 min (分), Q&A time (質疑応答時間) 40 min (分)

◆Lecture style(ex.: used projector, conducted experiments)

(講演方法 (例: プロジェクター使用による講演、実験・実習の有無など))

Projector, blackboard and water bottles (of different quality).

◆Interpretation(ex.: assistance by accompanied person, provided Japanese explanation by yourself) (通訳 (例: 同行者によるサポート、講師本人による日本語説明))

◆Name and title of accompanied person (同行者 職・氏名)

M2 Hashimoto Shohei

◆Other note worthy information (その他特筆すべき事項):

- Impressions and opinions from accompanied person (同行者の方から、本事業に対する意見・感想等がありましたら、お願いいたします。):

とても優秀で英語が得意な高校生には問題ないかもしれないが、ほとんどの高校生には酷なプログラムなのではないかと感じた。聴講者に興味を持ってもらい、理解してもらうには、発表者は普段大学で行っている発表ではなく、並々ならぬ工夫や努力を凝らすべきだと思った。