

(For JSPS Fellow)

Form B-5

Date (日付)

(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): Vesna Lavtizar ID No. P16773

- Participating school (学校名): Tokushima Prefectural Jonan High School

- Date (実施日時): 21. 6. 2017 (Date/Month/Year: 日/月/年)

- Lecture title (講演題目): Toxicity and environmental fate of antifouling biocides. A case study of tralopyril
- Name and title of your company (同行者 職・氏名)
Mr. Lin YingQuing

- Lecture format (講演形式):
 - ◆Lecture time (講演時間) 120 min (total) (分), Q&A time (質疑応答時間) ~ 30 min total (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))

The lecture was conducted through the PowerPoint presentation. Prior my lecture I performed an experiment in the laboratory and brought the samples with me. Students could make an observation of the experimental material which helped them to better understand my research topic. As there was a request to talk about my home country, I acquired and brought with me promotional material of Slovenia in Japanese language.

- Lecture summary (講演概要): Please summary your lecture 200-500 words.

Lecture was prepared according to the suggested topics of the high school teachers. In that way the lecture consisted of 5 main parts: 1) short introduction about myself 2) Introduction of my home country, Slovenia 3) My research at Kobe University 4) Reasons why to become a researcher 5) Importance of English.

First I told students about my education and my hobbies. The students listened about main features of Slovenia and comparison of Slovenia with Japan and Shikoku island. I distributed Slovenian maps and booklets (both in Japanese language) among the students.

When I talked about my research work, I first made an introduction, why my research is important. Slides had many pictures, to make it more interesting and understandable. I talked about biofouling – attachment of organisms to wetted surfaces and showed some examples. I also brought with me a piece of plastic, which I put in the sea for a month and a half and had many organisms attached on. Then I talked about antifouling paints, which are used to prevent the biofouling. I brought with me and show the students a piece of a ship surface, which was painted

with that paint and showed them how this paint works. Then I explained to the students, why such paints are a problem for the environment – they contain biocides which are very toxic. I explained about the toxicity of such biocides on the experiment I did beforehand on green algae in our laboratory and showed them the results. Where there was no biocide in the solution with the green algae, the solution was green. But the solution which had a biocide was colorless because all the algae died due to the biocide toxicity. I also talked about the stability of chemicals in the environment. Due to the sun and presence of water, chemicals in the environment degrade and new products are formed. I showed them this on an example of a biocide that I am working with in my research study.

Then I talked about why did I become a researcher. I guided them through the every day's life of a researcher, showing them pictures of me and other lab colleagues doing experiments in the lab, or doing sampling in the field. The aim was to encourage them for science. I pointed out that research and science can be found everywhere, not only in natural science. I asked students if they can find science and research in fields like literature, cooking and sport and we discussed together. I also talked about the importance of English in science, but also in personal life, in career and at obtaining new opportunities.

At the end I also asked them some questions about what kind of research they would do, which university they wish to enter and what are their favorite school subjects.

- Overall advice or comments to future participants in the program (今後の講師へのアドバイス):

The participants might experience that the Japanese high school classes are very different than we are used to from our home town. Therefore the first experience giving the lecture is very valuable to gain the impression of Japanese classes.

I would suggest involving the students as much as possible into the lecture. The actual practical experiment would in my opinion work the best. If experiment is not possible, the discussions would also work. The students were however not very proactive. If I gave a question (even if a very general one) to the whole class, no one would answer. However if I pointed on a person, he/she would answer. I found this system at the end better.

The teachers did not intervene in the lecture or encourage the students to participate in discussion/answering the questions even by perhaps repeating my question loudly in Japanese. Therefore it is the lecturers' task to keep the students motivated and make them cooperate. I had an accompanying person with me and asked him to translate the question in Japanese, to make sure they understood the question. I advise the fellow participants to talk to the teachers beforehand if they will need some help or cooperation from them.

My advice is not to go deeply in talking about the research work, even if it can be explained simply.

Pictures on the slides help a lot, and very simple English should be used. I asked for an assistance when something specific had to be explained.

Students were however very talkative and curious after the lecture. They personally came to me and they asked some questions at that time. They also gave me some answers on my questions that I asked during the lecture. At that time I found out that their English was actually good and that they could follow the lecture, but they were perhaps shy to ask or answer my question in front of the class.

- Other noteworthy information (その他特筆すべき事項):

Students are very excited to meet a foreign researcher, they very like to give many personal questions and take lots of pictures.

- Impressions and opinions from a company (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。)