

(For JSPS Fellow)

Form B-5

Date (日付)

20/July/2014 (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): Alexander FRASER (ID No. P13748)

- Participating school (学校名): Sapporo Nichidai

- Date (実施日時): 22/07/2014 (Date/Month/Year: 日/月/年)

- Lecture title (講演題目): (in English) The role of Antarctic sea ice in the global climate system
(in Japanese)

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

Antarctic sea ice is a very important part of the global climate system. In regions covered by sea ice, the sea ice acts as an insulator, keeping the ocean "warm" (~-2° C). But in polynyas, strong and cold winds push sea ice away from the coast, and expose the relatively warm ocean to the very cold atmosphere (often -30° C). This results in strong sea ice formation. When sea ice forms, some of the salt in the sea water gets rejected into the ocean. This salty, cold water is very dense, and sinks to the bottom of the ocean. This dense current drives global ocean circulation.

In addition to the above science content, this lecture will provide an introduction to Australia (in particular Tasmania, where I lived), and discuss how I became interested in Antarctic science.

- Language used (使用言語): English (translated to Japanese by Matsumura san)

- Lecture format (講演形式):

◆Lecture time (講演時間) 70 min (分), Q&A time (質疑応答時間) 20 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))

Used projector, and conducted experiments

◆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))

Assistance by accompanied person

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

A/Prof Dr. Yoshimasa Matsumura

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

The English teacher, Sawano san, was a fantastic host, and was also helpful translating for the students.

- 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。):

Scientific outreach is very important activities, and the researchers in Universities are willing to help this kind of programs. In addition, this is very good for both students and researchers from foreign countries, since it is a good opportunity to meet different cultures. However, I recognized that willingness and English skill of Japanese high-school students are still required to be improved. Scientific outreach for younger students in primary and/or junior high schools may help to improve these characteristics.