

(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): Gavin Craig (ID No. P16037)

- Participating school (学校名): Iwate Prefectural Mizusawa High School

- Date (実施日時): 15/11/2016 (Date/Month/Year: 日/月/年)

- Lecture title (講演題目): Applications of Coordination Chemistry (in English)

(in Japanese)

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

The lecture was on the applications of coordination chemistry. In the first part of the talk, I described my country of origin, and some of its famous inventions, discoveries, and scientists. Then, I talked about why I became a scientist, and why I work in the field of coordination chemistry.

I gave a brief introduction to the field of coordination chemistry, by explaining to the students who Alfred Werner was, and how he won the Nobel prize in Chemistry for his development of the understanding of connectivity in metal complexes. After this, I described how coordination bonds are used in the blood to help transport oxygen around the body, and how coordination chemistry can help to reduce the size of computers and information technology.

The next section was used to describe my research. First, I discussed the work from my PhD that was based on coordination complexes of iron, and then the work from my first Post-Doc, where I used high pressure techniques to alter the structure and properties of coordination complexes. Then, I told the students why I am in Japan and the research we carry out at Kyoto University. I described some of the features of porous materials, and why we study them. After explaining some examples of what porous coordination polymers are, the students performed an experiment, where they synthesised the well-known coordination polymer HKUST-1.

Finally, because the students are visiting Kyoto at the end of November, and at the request of one of the teachers, I included some photos of Kyoto, and recommendations of places to visit.

- Language used (使用言語): English, with difficult concepts translated by Shuya Ikemura ___

- Lecture format (講演形式):

◆Lecture time (講演時間) 50 min (分), Q&A time (質疑応答時間) 15 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))

For the lecture, a projector was used, and at the end an experiment was performed____

- ◆ 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))

Assisted by accompanying person (Shuya Ikemura)_____

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

- ◆ 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。):

貴重な経験をさせていただき、ありがとうございました。高校生と話す貴重な機会をいただけただけでなく、自分の英語力を試す、良い機会にもなりました。高校生にとっても、外国人と話す機会はあまりないと思いますし、進路を考える良い機会にもなったと思います。