

Form B-5

Date (日付) 19 February 2013
(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): Dr. Mirabbos Hojamberdiev (ID No. **P11066**)

- Participating school (学校名): Tokyo Metropolitan High School of Science and Technology

- Date (実施日時): 16 February 2013 (Date/Month/Year: 日/月/年)

- Lecture title (講演題目): (in English) What magic can nanophotocatalyst do?

(in Japanese) ナノ光触媒でどんなマジックを起こせるでしょうか？

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

The lecture given on 16 February 2013 at Tokyo Metropolitan High School of Science and Technology was titled as "What magic can nanophotocatalyst do?". Although the title of the lecture shows that the lecture is about nanophotocatalysts, I simply started introducing my personal and professional backgrounds, my motivation and research interest with a lot of pictures/images and even small movies. Afterwards, I shared my professional and personal experience on working in different countries on various research areas of Materials Science, as a researcher. The students were also familiarized with Uzbekistan, its history, culture, food, economy, climate, education system, historical cities, etc. Particularly, in this part, I have shown some similarities between Japanese and Uzbek culture. I am sure it was very interesting for students. As the second part of the lecture, I was very happy to share some of my recent research results on one-step hydrothermal synthesis and photocatalytic performance of ZnWO₄/Bi₂WO₆ composite photocatalysts for efficient degradation of acetaldehyde under UV light irradiation. The photocatalysis system, band gap structures, crystal structures of ZnWO₄ and Bi₂WO₆, synthesis method, and characterization were demonstrated. The lecture was finalized by answering the questions from students and teachers of the high school. The school students were active during the questions and answers part after the lecture.

- Language used (使用言語): English

- Lecture format (講演形式):

◆Lecture time (講演時間) 60 min (分), Q&A time (質疑応答時間) 30 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, showed some illustrated movies and experimental items

- ◆ 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))

Interpretation in Japanese made by a master second year student Mr. Yuki Makinose

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

Mr. Yuki Makinose (牧之瀬 佑旗)

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

The school host was Mr. Shingo Miyamoto. He well prepared and arranged everything.

- 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。)

As an accompanied person from my laboratory, Mr. Yuki Makinose has expressed his impression about the lecture, students' interest, and preparation. While returning to home from the school after the lecture, we shared our opinions on the train. He said the lecture was great with pictures/images and easily understood, and the students asked many questions about Uzbekistan and my research work. Even after the lecture, the students did not hesitate to approach him and ask more questions. He was so impressed that the students had asked questions about nanophotocatalyst and its working process. That means they have good knowledge about it and enthusiastic interest too. Overall, he said it was very interesting experience for him too.