

Form 3

Date (日付)

8/March/2011 (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 (参加外国人研究者氏名): Dakrong Pissuwan (ID No. P09063)

Participating school (参加機関(受入学校名)): Saga Prefectural Chienkan Senior High School

Date (実施日時):5/March/2011(Date/Month/Year:日/月/年) Time: from 10:30 to 13:00

Lecture title (講演題目): (in English) Biological applications of gold nanoparticles

(in Japanese) 金ナノ粒子の生体への応用

Lecture summary (講演概要):

I sent the abstract of my talk in advance to a school. It seems that this is a useful way for students to prepare themselves before attending a talk. In my talk, I have 5 sections as following:

1. Introduction of myself
2. Nanotechnology
3. Gold nanoparticles
4. Gold nanoparticles in biological/biomedical applications
5. Making gold nanoparticles

The question answer had been performed during the talk. Students were separated into 3 groups for running the experiment of how to make 20 nm gold nanoparticles. The time was about 30 min late because of unexpected conditions from the experiments.

Abstract of a lecture title

Nanotechnology is a novel technology that deals with objects at a nanoscale level. This technology has been applied in many applications to overcome many problems. Gold is one of the most important materials at the forefront of this technology. Once its size is changed from a bulk gold to a tiny gold called as `gold nanoparticle`; this small particle offers a lot of advantages to apply in a wide range of applications. Recently, gold nanoparticles have been extensively used in biological applications due to their unique optical, physical, and chemical properties. Gold nanoparticles are also biocompatibility because they have a low level of toxicity. Here, the progress of using gold nanoparticles in biological applications will be presented.

Language used (使用言語): English

Lecture format (講演形式):

○Lecture time (講演時間) 130 min (分), Q&A time (質疑応答時間) 20 min (分)

○Lecture style (examples: used projector, conducted experiments)

(講演方法 (例: プロジェクター使用による講演、プレ実験など))

Powerpoint presentation and running experiment

○Interpreter (example: assistance by host or colleague, provided Japanese explanation by yourself)

(通訳 (例: 受入研究者によるサポート、外国人研究者本人による日本語説明))

Assistance by colleague from Kyushu University: Mr. Ryohsuke Kurihara helped to translate my PPT from English to Japanese and also translated some technical term during Q&A section and experimental section.

Name and title of assistant (協力者 職・氏名) (example: host or colleague)

Mr. Ryohsuke Kurihara

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

I would like to thank the principle of the school (Mr. Isao Furukawa ) and Mr. Shigeru Sashiyama for their kind welcome. Mr. Kazuhisa Sonda for his very well organize and very kind support for the whole lecture and another staff who acted as a photographer. Finally, I also would like to thank JSPS staff, Ms. Eri Nakamura, for her kindness to be around there for the first Science Dialog Program activity of the school.

Impressions and opinions of assistant (協力者から本事業に対する意見・感想等がございましたら、お願いいたします。): This time, there were 2 students sleeping for a short period during a presentation. Their performance is an interesting feedback that I will think what I should do to have 100% attentions from students. However, both I and assistant were very impressive in helping to run this program. We both also appreciated to see students there were very active in a class especially during the experimental section. I was surprised to see Japanese students from Chienkan Senior High school asked a lot of questions after finishing a lecture. Some of them tried their best to use English. If there is any chance in a future, I and my assistant agree to join this program again.