（For JSPS Fellow）

Form B-5

Date（日付）
14/December/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（講師氏名）: Ryan Ganipan BANAL （ID No. P 10368 ）

- Participating school（学校名）: Hyogo Prefectural Kakogawa Higashi High School

- Date （実施日時）: 13/December/2011 （Date/Month/Year:日/月/年）

- Lecture title（講演題目）: （in English）Developing a New Deep-ultraviolet Artificial Light Source

（in Japanese） 新規深紫外光源の開発

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

My lecture started by giving a short background about myself. In here, I gave an overview about my country's culture and tradition. I also discussed the similarities between Japan and the Philippines in terms of geography. Then I disussed about my educational attainment as well as my present work as a researcher at Kyoto University. I gave as a background what the work of a researcher like myself is like and the importance of Science in our daily lives. For here on, I discussed the light phenomenon that we experience everyday. I introduced to the students the concept of artificial and natural sources of light, why we see different colors and described it in terms of reflection and diffusion phenomena. After giving them a background about how light is generated and its phenomenon, I discussed with them how light is produced from a semiconductor material. Here I introduced to them the concept of an "atom" and how it generates light. To give them a tangible example of the generation of light from a semiconductor, I introduced to them the concept of a light-emitting diode (LED) and how it could create various colors. After giving them these concepts regarding light, I introduced to the students my research in the deep-ultraviolet (DUV) region. Here, I was able to discuss the importance of research in the DUV region by enumerating its practical applications and how a new type of DUV light emitter can be achieved.

During my discussion and to keep the attention of the students, I asked questions related to my presentation and themselves. They were receptive and were able to answer in English. To help them understand what I was discussing, I also brought out a demonstration material (an LED device) to help them grasp the concept.

Generally, I was happy that I was able to convey to the students what I had wanted to convey to them. I was also glad to have been asked questions both related to my research and my acclimatization with the Japanese culture and tradition. Most of all, I am glad that most of the questions were related to my research, which for me is a proof that they were interested in my

research hence, understood my lecture.

- Language used（使用言語）: English

- Lecture format（講演形式）:

◆Lecture time（講演時間） 70 min（分）, Q&A time（質疑応答時間） 25 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 visual aid (Projector), demonstration material (LED light)

◆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））

Assistancce by accompanied person

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

1st year Master Student Yuuki Hayashi

◆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。）:

The impression from my accompanied person (Mr. Yuuki Hayashi) was at first he was afraid that nobody from the students would ask questions regarding our research (deep-ultraviolet light emitter). But he was surprised that almost all of the questions were about our research. He also believes that my presentation went well and the students understood it because I spoke English slowly and explained the topic in simple and comprehensible way.