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（For JSPS Fellow）

Form B-5

Date（日付）
02/11/2017（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）: Pancha Imran（ID No. P16399）

- Participating school（学校名）: Seishingakuen High School

- Date （実施日時）: 28/10/2017（Date/Month/Year:日/月/年）

- Lecture title（講演題目）: （in English）Microalgae: A new bio-resource for renewable energy

（in Japanese）

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

The lecture was conducted through the power point presentation. I first introduced about my self and my Japanese accompanying person. I divided my lecture into 3 different parts. In the first part, I explained about my country India. Its cultural diversity, history, and contribution of few Indian person to mankind. I also talked about many similarity and difference between the Indian and Japanese culture. In this part of my lecture mainly contains colorful slides and photographs of India so students can easily understand about my country and culture. In the second part of my lecture, I explained about why I select biological science and particularly microalgae for my research. I explain about microbiology and importance of microorganisms in our day to day life than I briefly taken about microalgae and its ecological importance. During this, I also explain about similarly and the difference between microalgae and plants and give overall idea about photosynthesis. After the introduction about microalgae I briefly talked about the major problem caused due to the utilization of fossil fuels and its future environmental impacts. In the third part of my lecture, I talked about importance and advantages of renewable energy how we can produce renewable energy, the various common resource utilized as a renewable energy. After that, I talked about utilization of various biomass like sugar crops, lignocellulosic biomass as the renewable energy resource and its advantages and disadvantages. Finally, I talked about the use of microalgae as a renewable energy resource, advantages of utilizing microalgae as renewable energy compared to other biomass. How we can cultivate microalgae at large scale, it's downstream processing to produce biodiesel and bioethanol. I showed them the picture of commercial cultivation farms for microalgae. In last I talked about the utilization of various algae in Japan in the day to day life like miso soup, onigiri etc as well as utilization and importance of microalgae to various applications.

- Language used（使用言語）: English

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- Lecture format（講演形式）: Power point

◆Lecture time（講演時間）55min（分）, Q&A time（質疑応答時間）10 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））

I used projector during my lecture

◆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 accompaning person

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

Sota Takahashi

◆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。）:

Mr.Imran taught mainly India's culture, habit and his research that related to microalgae in the lecture. All content was made students friendly and easy to understand. Student might learn different culture from Japan and how important his research theme is. These experiences will be helpful for students when they have to decide own career. Besides, in his lecture, he also explained about world environmental problems as well, that topic is definitely important thing in future. So it was really valuable lecture for students to learn about what kind of problem world are facing and what kind of things we have to solve. I hope some students will try to solve world environmental problems and energy problems in future and I can't wait Mr Imran and Seishin high school students will collaborate in somewhere someday in futere.