

(For JSPS Fellow)

Form B-5

Date (日付)

1/2/2017 (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): Jatindra Nath Bhakta (ID No. P L16556)

- Participating school (学校名): Takamatsu Sakurai High School in KAGAWA

- Date (実施日時): 30 / 1 / 2017 (Date/Month/Year: 日/月/年)

- Lecture title (講演題目): (in English) Probiotics: A potential tool of microbial technology for safeguarding life from intoxication of environmental pollution

(in Japanese) 環境汚染から身を守る手段としての微生物テクノロジー

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

The first part of lecture includes the different aspects of my country India, such as - scenarios of nature, environmental, historical, educational, scientific, cultural, agricultural and human life in simple way with lot of photographs along with movies. In second part, the lecture explained that my devotion and interest in research are to serve the society and for creating the clean environment by developing green technology,. In 3rd and 4th parts of lecture, I presented how critical problems of environmental pollution, especially heavy metal pollution damages the environmental and human healths. To solve this tremendous health hazardous problems of heavy metals, how we can apply the probiotic lactic acid bacteria as a potential tool of green bioremediation technology in order to develop the clean environment and to protect human health. In this regard, different materials and methods have been explained using the live relevant pictorial illustrations and movies to isolate and apply the beneficial probiotic bacteria in practical fields, that means, bioremediation of heavy metals from aqueous phase and from animals (mice and fish). The presentation also explained the various beneficial aspects of probiotics in human body and how it detoxify the toxic metals in animal body. It has been concluded that identified probiotic bacteria of Lactobacillus sp. could be used as a potential agents in detoxifying the toxic impacts of heavy metals in animal body and also in aqueous environment.

- Language used (使用言語): English with few Japanese

- Lecture format (講演形式):

◆Lecture time (講演時間) 105 min (分), Q&A time (質疑応答時間) 5 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))

Projector with sound system, Microscope, and various relevant research materials

- ◆ 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))

Few self explanation in Japanese

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

No

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

Some participated students are interested in probiotic bacterial application for detoxification.

- 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。):

This type of Workshop cum scientific lecture is good to motivate the students.

More time is required for Japanese explanation.