

(For JSPS Fellow)

Form B-5

Date (日付)

12/9/2016 (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): Eunchul Kim (ID No. P16087)- Participating school (学校名): Kariya High School, Aichi- Date (実施日時): 18/11/2016 (Date/Month/Year: 日/月/年)- Lecture title (講演題目): (in English) Biophysics and Photosynthesis(in Japanese) 生物物理と光合成

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

Interdisciplinary (学際的) research is a current trend for breakthrough and deep understanding in various research fields. Especially, biophysics is one of important research field to understand physical and chemical reactions in a cell. Among various research topics, photosynthesis is a representative research topic which require interdisciplinary research and is also important to solve energy and food crisis for our future. My research is related with biophysical study on photosynthesis, especially light-harvesting systems and its regulation. Photoprotection mechanism is the one of crucial regulation mechanisms in photosynthetic organisms against strong light conditions beyond their photosynthetic capacity. State transition is the mechanism which is responsible for excitation energy balancing between two photosystems. The two photosystems, photosystem I and II, are distributed in stroma lamella and grana membranes respectively. My research is on the relationship between state transitions and the structural/distributional heterogeneity of photosystems. My research revealed that heterogeneous structure of thylakoid membranes is closely related with and likely modulates state transitions of photosystems.

- 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))

using a large screen TV (power point)

◆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))

Assistance by a English teacher of Kariya high school and partly by my self

Must be typed

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

◆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。):