

(For JSPS Fellow)

Form B-5

Date (日付)

1/8/2016 (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): Zacharie Jehl (ID No. P 14767)

- Participating school (学校名): Chiba Prefectural Chosei Senior High school

- Date (実施日時): 15/07/2016 (Date/Month/Year: 日/月/年)

- Lecture title (講演題目): Introduction to advanced research in photovoltaic energy

(in Japanese)

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

The lecture dealt about the generation of electric power using solar energy. A brief introduction of semiconductors and their electric and optical properties was given. Then, we reviewed the basics of photovoltaics, emphasizing the principle of light absorption and electron generation, while giving some insights in the underlying quantum physics principles. Finally, my research on hot electrons solar cells was introduced, especially focusing on the concept of selective energy contacts, a special kind of contact that allows to filter the electrons depending on their energy.

- Language used (使用言語): English

- Lecture format (講演形式):

◆Lecture time (講演時間) 100 min (分), Q&A time (質疑応答時間) 20 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 + a small homemade experiment

◆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))

◆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。)