

Form B-5

Date (日付)

08/09/2017 (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): MALGRAS Victor _____ (ID No. P16050)

- Participating school (学校名): Ibaraki Prefectural TAKEZONO High School _____

- Date (実施日時): 07/09/2017 (Date/Month/Year: 日/月/年)

- Lecture title (講演題目): Physical and chemical aspects of fluorescent materials

- Name and title of your company (同行者 職・氏名)

National Institute for Materials Science (NIMS) _____

- Lecture format (講演形式):

◆Lecture time (講演時間) 70 min (分), Q&A time (質疑応答時間) 15 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))

Powerpoint presentation using projector, conducted experiments involving fluorescent dyes and UV light. _____

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

The first part of the lecture was about me, my education, what made me go into science, my experience during high school, what brought me to work in Japan. Then I made a lecture on the physics behind fluorescence and phosphorescence, including electrons, light-matter interactions, Beer-Lambert law, atomic orbitals, radiative recombination. I explained the notion of quantum confinement by showing the student how quantum dots fluorescence change with their size. I explained briefly what my latest research consists in, using the concept I explained previously. Finally I carried an experiment where the students mixed solutions containing different fluorescent dyes to obtain new colors based on additive color mixing.

- Overall advice or comments to future participants in the program (今後の講師へのアドバイス):

To be careful not to make the presentation to technical or advanced, and to make sure you can explain clearly and simply what your research is to high school students.

- Other noteworthy information (その他特筆すべき事項):

- Impressions and opinions from a company (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。)