

(For JSPS Fellow)

Form B-5

Date (日付)

28/02/2014 (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): **MULYANA, Yanyan** (ID No. **P 13741**)

- Participating school (学校名): **Hikawa High School, Yamanashi Prefecture**

- Date (実施日時): **20/02/2014** (Date/Month/Year: 日/月/年)

- Lecture title (講演題目): (in English) **Water and sunlight as Future Energy**

(in Japanese)

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

**While the world's energy demand has increased very rapidly as a result of a fast growing population, fossil fuel as our main source of energy will diminish sooner rather than later. Therefore, we need to think how to create new sources of renewable energy. Nature's photosynthetic system in plants provides us with a clue on how water and sunlight can be converted efficiently into usable energy. Through chemistry, the photosynthetic process can be copied and a device that is able to break water into oxygen and hydrogen ( $2\text{H}_2\text{O} \rightarrow \text{O}_2 + 2\text{H}_2$ ) using light can be developed in a laboratory. Our research has focussed on the development of such devices from transition metal complexes and some of the highlights will be presented**

- Language used (使用言語): **English**

- Lecture format (講演形式):

◆Lecture time (講演時間) **45 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**

◆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))

**Some Japanese explanation provided by Ms Itoko Tonomura**

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

**Itoko Tonomura**

◆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

Must be typed

がありましたら、お願いいたします。):

**The lecture was good, easily understood by the students and we received good responses and questions from both the students and teachers.**