

(For JSPS Fellow)

Form B-5

Date (日付)

30/10/201

(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): Dr. W. M. C. Sameera (ID No. P14334)
- Participating school (学校名): Ichikawa Gakuen Ichikawa Senior High School (Ichikawa-city, Chiba.
- Date (実施日時): 14/10/2015
- Lecture title (講演題目): (in English) The quantum mechanics of chemical reactions
(in Japanese) 化学反応における量子力学

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

Purpose of my lecture was three fold; (i) provide information about my country (Sri Lanka) and my culture, (ii) discuss my scientific career and how English is useful to achieve my goals, (iii) explain the quantum mechanics of chemical reactions through examples, and perform a practical session on quantum chemical calculations.

At the beginning of my presentation, I gave a brief introduction about my research advisor (Prof. Keiji Morokuma) and our research group interest. Then, I discussed about my country (Sri Lanka) and my culture. After that, I introduced my undergraduate, postgraduate, and postdoctoral institutions, and some interesting places I visited. Next, I discussed my roles as a scientist, and emphasized why learning English is important.

Then, I discussed the quantum mechanics of chemical reactions and some practical examples from my scientific research. This section was explained by using animated videos and schemes of the chemical reactions. In the practical session, students analyzed quantum chemical calculations of simple molecules, such as H₂O, CO₂, and CH₄.

- 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) 40 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))
Multimedia 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))

Assistance by accompanied person.

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

鈴木 聡 (京都大学 福井謙一研究センター 研究員)

◆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。):

量子化学は高校の化学の授業では扱わない分野なので完全に理解してもらうことは難しかったかと思うのですが、少なからず興味を持った生徒さんもいたようなのでその点はよかったですと思います。高校生へこのような講演をする機会はなかなかないので良い機会になりました。