

(For JSPS Fellow)

Form B-5

Date (日付)

2013/12/02 (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): MYALITSIN, Anton (ID No. P12504)- Participating school (学校名): 埼玉県立熊谷高等学校- Date (実施日時): 2013/12/02 (Date/Month/Year: 日/月/年)- Lecture title (講演題目): (in English) Non-linear Spectroscopy of the Surface(in Japanese)

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

In the beginning of the lecture I gave a short introduction about myself and the different countries I lived in (Russia-Germany-England). I explained why I became fascinated in Japan and what our research group at Riken is doing.

The second part of the lecture gave a general guidance to the students. I explained why English is important in the modern world and how it can be studied in an enjoyable way, e.g. through movies and books. Also, I showed a short speech by R. Feynman how scientists can enjoy the beauty of the world in a much deeper way.

The last part was devoted to spectroscopy in general, using the spectrum of the sun as an example. With a simple spectrometer, built from a DVD, I showed the students how the spectrum of the sun is different from a mercury gas lamp. Further I explained how we can study different materials with optical spectroscopy. Finally, I addressed non-linear effects in spectroscopy (sum frequency generation), and how it can be used to selectively study the interface, to determine the structure of the water at the surface.

- Language used (使用言語): English

- Lecture format (講演形式): Presentation

◆Lecture time (講演時間) 40 min (分), Q&A time (質疑応答時間) 10 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, demonstration with a DVD as a spectrometer◆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)) Englishteacher at school

◆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):

It was very nice to visit the Kumagaya High school again. The staff was very supportive, and in particular the translation provided by the English teacher was very meaningful and helped to get my message across to the students.

- 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。):