

(For JSPS Fellow)

Form B-5

Date (日付)

2013/09/06 (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): 福島県立福島高等学校- Date (実施日時): 2013/09/06 (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 came to Japan, what our research group at Riken is doing and presented Riken itself as an organization.

The second part of the lecture gave a general guidance to the students. I explained why English is important in the modern world, what kind of passion drives a researcher and explained the scientific method and the formulation of new knowledge in science. Using the example of the photographer E. J. Muybridge and his freeze frame photography in the 19<sup>th</sup> century of a galloping horse I showed how new techniques and methods are developed from experimenting and how it can lead to new technologies.

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. Finally, I addressed non-linear effects in spectroscopy (sum frequency generation), and how it can be used to selectively study the interface.

- Language used (使用言語): English

- Lecture format (講演形式): Presentation

◆Lecture time (講演時間) 60 min (分), Q&A time (質疑応答時間) 30 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 home-built 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)) none

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

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◆Other note worthy information (その他特筆すべき事項):

I was very impressed with the eagerness of the students to learn something. They listened carefully and after the presentation asked many questions, almost all of them regarding the scientific part (spectroscopy). Even after the official question time, some of the students came forward to ask more. All questions were asked in English.  
The staff was very supportive, and took good care in all preparations (prepared laptop, speakers, picked us up at the station etc.).

- 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。):