

(For JSPS Fellow)

Form B-5

Date (日付)

02/12/2016 (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): Safdar Ali (ID No. P15025)- Participating school (学校名): Kariya High School- Date (実施日時): 18/11/2016 (Date/Month/Year: 日/月/年)- Lecture title (講演題目): (in English) EUV spectroscopy of highly charged ions for plasma applications(in Japanese)

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

In the first part of my lecture I introduced students with my country, Pakistan. I briefly described education system, culture, nature, historical places and import/export with Japan. For motivation, I discussed "my journey from a small village to Tokyo" with pictures and maps, by giving an overview of my education and achievements.

In the second part I briefly introduced students with the EUV spectroscopy by providing simple examples. I also spent some time to explain; what are highly charged ions? How they play their role in plasma physics and in other scientific fields?. In particularly, I discussed the motivation and need of EUV spectroscopic data for plasma applications by giving examples of astrophysical observation and fusion plasma device like ITER.

In the third part of my lecture, I discussed about our laboratory and equipment called electron beam ion trap used for the production and study of highly charged ions. I briefly described how we can produce and study ions by using different CCD's and cameras. I showed some slides with experimental spectra collected from highly charged Iron, Xenon, Barium, and Tungsten. I explained in detail why this data is important for modeling and diagnosing of hot plasmas.

I concluded my lecture by giving a short summary and by providing a chance to the students to ask me questions.

- Language used (使用言語): English

- Lecture format (講演形式):

◆Lecture time (講演時間) ~90 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))

                   used 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))

                  

◆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):

Well, It was a nice experience, I enjoyed my interaction with the high school 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。):