

(For JSPS Fellow)

Form B-5

Date (日付)

21/02/2017 (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. Harshal P. Mungse (ID No. P 16075)
- Participating school (学校名): Hikone Higashi High School (Hikone – City, Shiga Prefecture)
- Date (実施日時): 20/02/2017 (Date/Month/Year: 日/月/年)
- Lecture title (講演題目): (In English) "Graphene: Wonderful Material in a Decade"
(in japanese)

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

My lecture was divided in three parts-

(i) In this I briefly introduced about allotrope of carbon ie, various types of carbon materials and the most recently developed 2D carbon material (graphene). Why graphene is called as wonderful material in a decade?. In the research field **idea** is the most important tool and explained by giving an simple example about previous difficulties in synthesis of graphene and later how simple idea works for synthesis of graphene by using adhesive tape and graphite. This idea won the biggest prize (**Nobel prize**).

(ii) In this I talked about tribology (study of friction, wear and lubrication) term which was new for students but by giving simple examples with video helped for better understanding. I explained its practical importance in daily life. Then I talked about my research and how I used graphene material for tribology applications.

(iii) In the last part of my talk, I Introduced my country (India), life in india, and made some comparisons with Japan about population, food, culture, education system from primary school to higher education.

In order to promote better understanding to the students nearly every slide was

translated in Japanese during lecture by accompanied person.

- Language used (使用言語): English

- Lecture format (講演形式):

◆Lecture time (講演時間) 70 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))

Powerpoint presentation, 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))

Assistance by accompanied person

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

Dr. Takashi Ichii (Associate Professor)

◆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。):

高校生に直接接する機会はなかなかありませんので、個人的にも非常に有意義な時間を過ごすことができました。ありがとうございました。高校生にわかりやすく最先端の研究を伝えるということは、自分の研究を改めて見直すきっかけとなり、Dr. Mungse にも良い機会になったと思われます。一方で、外国人研究者に日本の高校生の現在の知識レベルを正確に把握しておくことは困難であるため、やはり今後も日本人研究者の同行が非常に重要であると思われます。