

(For JSPS Fellow)

Form B-2  
(FY2018)

Date (日付)  
25/12/2018 (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): RAJESH KUMAR (ID No. P18063)
- Participating school (学校名): Tokai University Shizuoka Shoyo Senior High School, Shizuoka-City, Shizuoka Prefecture, Japan
- Date (実施日時): 15/12/2018 (Date/Month/Year: 日/月/年)
- Lecture title (講演題目): Novel Carbon Two Dimensional (2D) Nanomaterials: Graphene
- Name and title of your accompanying person (講義補助者 職・氏名)  
Mr. KAZUKI KISHIDA, M1 student
- Lecture format (講演形式):
  - ◆Lecture time (講演時間) 75 min (分), Q&A time (質疑応答時間) 5 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 using projector
- Lecture summary (講演概要): Please summary your lecture 200-500 words.

The lecture was divided into three main parts: (i) about my home country (India), (ii) motives for becoming a scientist/ researcher and what is interesting about my research and (iii) basic knowledge about novel carbon nanomaterials: Graphene (including carbon nanotubes). In the first part, I introduced myself and explained some general information about India including Indian history, India's great personalities, religion, climate, tourist place, culture (diversity in language, festival art, food, events, fashion etc.). The second part was consisted of some basic information about my research finding and the reasons why I decided to continue my career in science (scientist/ researcher). In the third part, I explained in details about novel two dimensional (2D) carbon nanomaterials as "Graphene". I explained in details that how this 2D graphene nanomaterial is considered as thinnest, strongest and most conductive material to both electricity and heat. Also, I explained that how this 2D graphene nanomaterial is paying huge attention for applications in research field related to energy storage/ conversion (battery, supercapacitor, fuel cells and solar cells), electronics, optics, sensors and bio-applications etc. Before starting about graphene nanomaterials, I also explained about other kind of carbon allotrope materials as graphite, diamond, fullerene and carbon nanotubes. Each

part of my lecture was translated and explained in Japanese by my accompanying colleague.

- Overall advice or comments to future participants in the program (今後の講師へのアドバイス):

It is a good opportunity to interact and share our knowledge with Japanese students.

- Other noteworthy information (その他特筆すべき事項):

- Impressions and comments from the accompanying person (講義補助者の方から、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。)