

(For JSPS Fellow)

Form B-5

Date (日付)

02/10/2013 (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): Choong Hyun Lee (ID No. P 13058)- Participating school (学校名): Ichikawa Gakuen Ichikawa Senior High School- Date (実施日時): 01/10/2013 (Date/Month/Year: 日/月/年)

- Lecture title (講演題目): (in English) Materials Innovation for Advanced Semiconductor Devices
(in Japanese)

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

The transistor is a three terminal, solid state electronic device. In a three terminal device we can control electric current or voltage between two of the terminals by applying an electric current or voltage to the third terminal. If cells are the building blocks of life, transistors are the building blocks of the digital revolution. Without transistors, the technological wonders you use every day - cell phones, TV, computers, cars, etc - would be vastly different, if they existed at all. This course covers basic knowledge of transistors, focusing on history of transistors, the concept of scaling, and future outlook of nanotechnology. Recent advances in semiconductor nanotechnology with new materials will be briefly reviewed to understand the emerging trends in semiconductor industry. Also, students are required to undertake simple experiments.

- Language used (使用言語): English

- Lecture format (講演形式):

◆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))

I used projector for a lecture and conducted simple experiments

◆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))

講師本人による英語&日本語説明

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

なし

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

なし

- 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。):