

Form B-2
(FY2022)
Must be typed

Date (日付)
08/11/2022 (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): LEE, Yang-Chun (ID No. P20045)

- Name and title of the lecture assistant (講義補助者の職・氏名)

- Participating school (学校名): Junior & Senior High School at Komaba, University of Tsukuba

- Date (実施日時): 05/11/2022 (Date/Month/Year: 日/月/年)

- Lecture title (講義題目):

Manipulating Light in Nanoscale: On-chip Laser Array for Photonic Integrated Circuits

- Lecture format (講義形式):

◆ Onsite ・ Online (Please choose one.) (対面 ・ オンライン (どちらか選択ください。)

◆ Lecture time (講義時間) 90 min (分), Q&A time (質疑応答時間) 40 min (分)

◆ Lecture style (ex.: used projector, conducted experiments)

(講義方法 (例: プロジェクター使用による講義、実験・実習の有無など))

Oral presentation (in English) with a projector

- Lecture summary (講義概要): Please summarize your lecture within 200-500 words.

The lecture started with my self introduction. My educational background was introduced, and then my working experience and the reason why I decided to do research in Japan were presented. To make students understand my contry Taiwan, the mordern history of Taiwan was firstly introduced. The interesting facts about Taiwan was then shown to students. Because there is a history story between Taiwan and Japan (during the Taiwan under Japanese rule period), several things in Taiwan have been influenced by Japanese culture, and some examples including the building style, name of places, and name of foods were shown. I also prepared some photos of Taiwanese foods to increase students attention.

Before talking the science, I also shared my motivation for becoming a scientist. A quote by Steve Jobs was provided to encourage students to learn continually. After that, the scientific parts related to my current research interest were introduced. I brifly explained the light behaviors in materials, and some examples have been provided. The light behaviors depends on the composition

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(appearances of different alloys), size (difference between bulk gold and gold nanoparticles), and micro/nano-structures of materials (structures in living creatures) have also been elaborated. In the last part about the science, the work I have done in The University of Tokyo was described, including the motivation, the experimental process, and the results and discussion.

The final part of the lecture is the Q&A time. Three students asked about the role played by nanolaser in photonic integrated circuits. Students also want me to share more research experiences and Taiwanese cultures.

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

- Impressions and comments from the lecture assistant (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。):