

(For JSPS Fellow)

Form B-2
(FY2018)

Date (日付)

01/06/2018 (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): CHENG XUEMEI (ID No. P17723)
- Participating school (学校名): Aichi Prefectural Nishio High School
- Date (実施日時): 01/06/2018, 13:20 – 15:10 (Date/Month/Year: 日/月/年)
- Lecture title (講演題目): Development of Silicon Based Solar cells
- Name and title of your accompanying person (講義補助者 職・氏名)
Nakagawa Yoshihiko
- Lecture format (講演形式):
 - Lecture time (講演時間) 60 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))
Projector
- Lecture summary (講演概要): Please summary your lecture 200-500 words.
My lecture was mainly divided into seven parts, first part was to introduce my background, study and work experience in both China and Norway. Later, in order to give students some ideas about China and Norway, I showed some slides about Chinese food and drink, sports and culture. Since most students are not familiar with Norway, I spent some time to talk my studying experience in Norway, and also included its food habit, outdoor life and national festival. Through comparing sunny day pictures in China and Norway, it showed air pollution problem, leading to the development of solar energy. Firstly, why do we need solar energy? (Energy consumption and environment pollution) Secondly, what is a solar cell? (Photovoltaic mechanism and bandgap concept) Thirdly, what materials can be used to make solar cell? Fourthly, how's the silicon solar cell market? Then how to make a silicon solar cell? And how to improve the silicon based solar cell?
In general, my lecture included the experience of studying and living abroad, brief introduction about China and Norway, as well as the importance of renewable energy and the development of silicon based solar cells.
- Overall advice or comments to future participants in the program (今後の講師へのアドバイス):
Less theoretical background and longer discussion time.

- 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。)

高校生が現役の外国研究員のお話を伺い、科学の最先端と英語の経験を得るともいい機会だと感じました。意見としましては、高校生の英語、化学、物理をどこまで学んでいるか分かれると講師がスライドを作りやすいと感じました。講演を受ける学年や理系・文系等の情報が講演者に伝わっておらず、スライド作りで講演者からアドバイスを求められることがありました。私も同じ高校出身ということもあり、おおよその高校生の理解度について教えることができましたが、当日まで完成したスライドが簡単すぎるか難しすぎるか判断がつかず、不安でした。このあたりは、高校側から簡単にフォローしていただけると有難いと思いました。