

Form B-5

Date (日付)

14/09/2011 (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): BREEDON Michael (ID No. P10353)
- Participating school (学校名): Kumamoto prefectural Daini High School
- Date (実施日時): 2011/09/13 13:45 - 15:35
- Lecture title (講演題目): (in English) An Introduction to Australia & Gas Sensor Technology
- Lecture summary (講演概要): Please summary your lecture 200-500 words.
This lecture aims to give science dialogue participants a brief introduction to Australia and introduce some basic gas sensor technologies. The first half of the lecture will be devoted to my life and experiences in Australia, focusing on the research culture and natural beauty of Australia. The second half of the the lecture will introduce three different gas sensing technologies, namely: Quartz Crystal Microbalances (QCM), Field Effect Transistor sensors (FET), and the mainstay of the commercial gas sensing world the resistive type semiconducting gas sensor. Basic introductions into these technologies about their construction and operating mechanisms will be provided alongside real world scientific experimental data. Finally the lecture will conclude with a hands on experimental session examining the gas sensing properties of a commercial SnO₂ based semiconducting resistance type ethanol sensor.
- Language used (使用言語): Primarily 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) 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 and alcohol gas sensor 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))
Some assistance from teaching staff, especially Kenshi TAKAKI
 - ◆Name and title of accompanied person (同行者 職・氏名)
N/A
 - ◆Other note worthy information (その他特筆すべき事項):
N/A
- 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。):
N/A