

Form 3

Date (日付)

30-5-11

(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 (参加外国人研究者氏名): Daniel Packwood (ID No. P10339)

Participating school (参加機関(受入学校名)): Gifu Gizan High School

Date (実施日時): 27-5-11 (Date/Month/Year: 日/月/年) Time: from 14:00 to 15:40

Lecture title (講演題目): (in English) Probability and Molecules

(in Japanese) 分子と確率

Lecture summary (講演概要):

Typical chemical systems, such as a beaker of water, contain so many molecules that it is impossible to know each of their positions simultaneously. We are therefore always uncertain about the exact state of such systems. This lecture described how probability, the mathematical study of uncertainty, can be used to extract useful information from chemical systems. Atom collisions with liquid surfaces were used as an example, and I showed the students how we can visualise the molecular profile of a liquid surface *via* a simple coin flipping exercise. I also gave a short presentation about New Zealand, and another one about the life style of a scientist.

Language used (使用言語): English (with some Japanese text in the presentation and occasional verbal Japanese explanations).

Lecture format (講演形式):

Lecture time (講演時間) 50 min (分) (with a break), Q&A time (質疑応答時間) 15 min (分)

Lecture style (examples: used projector, conducted experiments)

(講演方法 (例: プロジェクター使用による講演、プレ実験など))

PowerPoint presentation *via* projector, exercise with the class about following the motion of molecules.

Interpreter (example: assistance by host or colleague, provided Japanese explanation by yourself)

(通訳 (例: 受入研究者によるサポート、外国人研究者本人による日本語説明))

Some assistance from high school staff. I provided Japanese explanation in the PowerPoint presentation, and also some verbal explanation.

Name and title of assistant (協力者 職・氏名) (example: host or colleague)

No accompanying assistant.

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

Before the lecture I was taken for a tour of the school by the principal.

Impressions and opinions of assistant (協力者から本事業に対する意見・感想等がございましたら、お願いいたします。):