

Form B-5

Date (日付)

11/10/2011 (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): Meryem BENOHOUD (ID No. P 10817)

- Participating school (学校名): Ichikawa High School, Chiba prefecture

- Date (実施日時): 11/10/2011 (Date/Month/Year: 日/月/年)

- Lecture title (講演題目): (in English) Chemistry in our everyday life

(in Japanese)

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

1) I introduced myself (origins, culture) and then I described my journey from High School to Doctorate.

2) I defined chemistry with key words (in English and Japanese) and then I explained how and why chemistry could also be considered as dangerous.

3) I explained how chemistry was present in our everyday life with precise examples. I explained also the impact of the Industrial Revolution in Europe and in Japan.

4) I wanted to show how Science is present in our lifes and discussed the idea that chemistry = cooking! I showed that we have a scientific approach when we bake a chocolate cake: ingredients, proportions, procedure.

5) Experiments with students: Extraction of chlorophyll from spinach and analysis by Thin Layer Chromatography.

Introduction: I explained what is an extraction and how it is used (example of practical application: medicine from Nature). I also presented chlorophyll and why it is an important biomolecule.

6) Experiments with students: extraction of chlorophyll: fresh spinach and ethanol (mortar and pestle), then preparation of TLC plates (4 plates/group of students, so 1 plate/student), preparation of 4 eluting solvent mixtures with the participation of students (choice of solvent proportions and preparation). Visual and under UV-lamp analysis of the 4 TLC obtained. I explained the correlation between the polarity of the solvent and the migration speed. Question: Can you predict which product will come first when we perform a chromatography column?

7) I presented the different possibilities for a student in chemistry: different areas in chemistry field, the possible professions, examples of Japanese companies doing chemistry research/production, the possibility of research and/or teaching in academia.

8) Interaction with students: Who is interested by Science?

9) I conclude the session with a personal message to students.

- Language used (使用言語): English

- Lecture format (講演形式):

◆Lecture time (講演時間), Q&A time (質疑応答時間) total time 120 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))

Used a projector and used the black board for more detailed explanations, conducted experiments with students

◆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))

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

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

- 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。):