（For JSPS Fellow）

Form B-5

Date（日付）
19.06.2012 （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）: Veronica Sanda Chedea （ID No. P 10713）

- Participating school（学校名）: Shimane Prefectural Hamada High School

- Date （実施日時）: 14.06.2012 （Date/Month/Year:日/月/年）

- Lecture title（講演題目）: （in English） From Romania to Japan: Oxidation and antioxidants

（in Japanese） ルーマニアから日本へ：酸化と抗酸化物質

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

In the first part of my lecture I introduced the students to my country, Romania. After this introduction I presented them the importance of learning English, especially for young people studying science. The scientific part was focused on food chemistry in particular on oxidation and antioxidants. The importance of studying the chemistry of food in order to inhibit the oxidation through antioxidant compounds was discussed. Oxidation of foodstuffs decreases their consumer acceptability by producing low-molecular-weight off-flavor compounds, as well as by destroying essential nutrients, and it also produces toxic compounds. Suppress oxidation of foodstuffs, therefore, is important to retain the healthy value of foodstuffs. One of the effective and practical ways to suppress oxidation is to use antioxidants, some of which significantly delay or inhibit oxidation of oxidizable nutrients at much lower concentrations compared to the higher contents of lipids and proteins in foods. Foods containing high level of antioxidants were presented as well as their importance in human health through nutrition. Chemical formulas of main antioxidants like Vitamin C, β-carotene, quercetin, catechin and procyanidins were presented and discussed.

Voluntarely two Master and one undergraduate students of our lab, have joined with their short presentation and so we could give to the highschool students a glimpse of studying science and English at different levels. One Master student, Luc Berton is from France and the other one is Japanese, Hirohumi Yuasa. The name of the undergraduate student is Yuki Tamura. The importance of English in communication between us has been proven lively through our team discussions during the presentation. The question of the highschool students were very good so a real science dialogue took place at the end of the two hours.

- Language used（使用言語）: English

- Lecture format（講演形式）:

◆Lecture time（講演時間）40 min（分）, Q&A time（質疑応答時間）20 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 projector

◆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））

Assistance by accompanied person

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

Associate Prof.・Mitsuo Jisaka

◆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。）:

本プログラムは、高校生が外国人研究者の話を直接きくことのできる良いプログラムだと思います。今回も、講義後、2名の生徒から講演者の Chedea 博士にメールがあり、その後の交流が生まれているようです。高校生にとり、外国人と英語でコミュニケーションをとることが極めて身近なものになったと思います。高校生相手の授業で難しいところは、相手の知識が限られていることです。このような条件で授業を行う場合、科学の先端低な知見を理解させるというより、考え方を知らせることがより教育的と思われます。そこで、高校では、事前に、外国人研究者を招いての授業で、各自が何を期待するのか、何を学び取りたいのか、をできるだけ明らかにさせるような指導がなされ、そのような生徒自身の希望を授業者が予め共有できれば、より有益な授業になるのではないかと思われます。