

(For JSPS Fellow)

Form B-5

Date (日付)

03/08/2015 (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): GAMAL ELMASRY (ID No. P13391)

- Participating school (学校名): Tsuru High school, Yamanashi Prefectural

- Date (実施日時): 26/06/2015 (Date/Month/Year: 日/月/年)

- Lecture title (講演題目): (in English) Non-contact Sensing of Food Quality By Spectral Imaging

(in Japanese) スペクトルイメージングによる食品の品質評価の非接触センシング

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

This lecture was given to high-school students and I gave a small introduction about myself, my home country and university as suggested by JSPS. This lecture underscores the theoretical and practical issues associated with the development, analysis, and applications of spectral imaging for food quality evaluations. First, the fundamental configuration and working principles of the systems as well as the basic concept and structure of data will be described and explained. Next, the lecture profoundly tries to impart an understanding of different approaches used during image acquisition, data collection and visualization, and also to present strategies and essential image processing routines necessary for making the appropriate decision during detection, classification, identification, quantification and/or prediction processes. Besides the lecture, a demonstration of using a spectral imaging, spectral camera, filters and illuminations in various applications was also given.

- Language used (使用言語): **ENGLISH**
- Lecture format (講演形式): **PowerPoint presentation and experiments.**
 - ◆Lecture time (講演時間) **60 min (分)**, Q&A time (質疑応答時間) **15 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))
Using data show projector and conducting an experiment.
 - ◆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))
Intrepretation and translation was given by an accompanied Japanese researcher.
 - ◆Name and title of accompanied person (同行者 職・氏名)
Mr. Kazuya Ito
 - ◆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。):

He likes the ideas and was very happy to participate in such a program. Also, he demonstrated his own illumination unit he personally designed and developed.