

(For JSPS Fellow)

Form B-5

Date (日付)

14/03/2015 (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): Gabriele Chiaro (ID No. P14056)
- Participating school (学校名): Chiba Prefectural Chosei Senior High School
- Date (実施日時): 24/03/2015 (Date/Month/Year: 日/月/年)
- Lecture title (講演題目): (in English) Geo-disasters mitigation
(in Japanese)
- Lecture summary (講演概要): Please summary your lecture 200-500 words.

Geo-disasters are adversities caused by the failure of ground or the collapse of earth structures (e.g. embankment, dam etc.). They are triggered by natural events such as earthquakes, heavy rainfall, volcanoes etc. and may have catastrophic consequences (e.g. damage to buildings, houses, road etc.). Often, they kill people. Geo-disasters are unfortunately very common all around the world, including Japan and Italy (my home country). It is impossible to stop earthquakes and many geo-disasters from occurring, but it is possible to mitigate (reduce) the effects of geo-disasters through the development and the use of engineering solutions.

During my lecture I tried to not only present what I do as a researcher but also what it is like being a researcher and what you need to consider if you are planning a research career. I wanted to make my presentation simple and enjoyable, so I used lots of photos that I have taken around the world to show the students what geo-disasters are and how to mitigate their effects. I think that a picture tells a story better than many words. Moreover, I explained about my motivation to become a researcher and why I came to work in Japan. Also, I gave a brief introduction about my home country and hometown. Following my lecture and the Q&A time, I led the students through one short activity that involved conducting an experiment. The experiment was quite simple, but reproduced the phenomenon of soil liquefaction during an earthquake. Through this exercise I could show the students that a sandy soil is usually very strong and can support heavy buildings before an earthquake; but, it will most likely behave like a liquid during an earthquake, therefore, losing its capacity to sustain anything built on it. My lecture concluded with some take-home messages to help them think about their future careers.

- Language used (使用言語): English
- Lecture format (講演形式):

- ◆Lecture time (講演時間) 45 min (分), Q&A time (質疑応答時間) 45 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 power point slides and projector; conducted 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))
When necessary, Japanese explanation was provided by the school teacher

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

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