

(For JSPS Fellow)

Form B-5

Date (日付)

13/01/2015 (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) : GIMBERT FLORIAN _____ (ID No. P13351)

- Participating school (学校名) : Kanazawa University Senior High School- Date (実施日時) : 15/12/2014 (Date/Month/Year: 日/月/年)- Lecture title (講演題目) : (in English) A Journey to the Nanoworld

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

In my lecture, I have first described my country with comparisons to Japan and also the different places where I lived to show the diversity of landscapes and towns (from small village to important city) in France. I also explained the french educational system and difference with japanese system with practical examples like the last national examination in philosophy or in physics. I described too the life in a french high-school (working days, holiday, the absence of uniform) and gave the explanation of the name of my high-school coming from a very famous mathematician, physicist and philosopher.

In the second part of my lecture, I gave to the students a global view of the computational materials science, especially in Nanomaterials. For that, I started to explain what is a supercomputer with the example of the K computer in Kobe and with comparison with personal computer used by students. I described also the wide diversity of applications of computational science with short movies and moved finally on my field, computational materials science. My main objective was to give to the students a survey of nanoworld with the scale of the nanomaterials and their properties. I started to explain the nanomaterials with a very easy example, the lotus effect which can be seen at the macro scale but with an explanation at the nano scale. I described also the carbon nanomaterials with graphene, carbon nanotubes and fullerene. I explained why the size of the materials is important to obtain new properties and introduced the quantum mechanics with the example of the duality wave-corpuscle. Some students asked after the presentation very interesting questions on this topic. Finally I described my actual research, how I work in collaboration with my experimentalist co-workers and the researcher life with international papers and conference given in English.

- Language used (使用言語) : English

- Lecture format (講演形式) :

◆Lecture time (講演時間) 100 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))

Presentation shown using a 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))

At regular intervals an accompanying person (Prof. Y. Yamada-Takamura) summarized in Japanese what it has been said

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

Prof. Y. Yamada-Takamura

◆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。) :

I felt that Dr. Gimbert's talk was very stimulating for students in both cultural and scientific ways. There were many different questions from the students after his talk, reflecting their diverse interests. It might have been better if we could secure more time for discussions.