

(For JSPS Fellow)

Form B-5

Date (日付)

13/12/2016 (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): Dr. Felix WARMER (ID No. P-16756)

- Participating school (学校名): Okazaki High School

- Date (実施日時): 12/12/2016 (Date/Month/Year: 日/月/年)

- Lecture title (講演題目): (in English) Magnetic Fusion as Sustainable Energy Source for the Future of Mankind

(in Japanese) 人類の未来のための環境にやさしい磁器核融合

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

Content:

With the increasing world population and new technologies the world energy demand will also increase. At the same time we need to protect our climate and environment which means we cannot use energy sources such as coal or oil which produce CO₂ and lead to global warming. Therefore we must develop new, environmentally friendly and sustainable energy sources.

"FUSION" is one of these new energy sources and has the potential to solve the energy problem of the whole world. FUSION is the energy source of our sun, or any star in the universe. Light particles (hydrogen) come together at high temperatures and fuse together to build a more heavy particle (helium). During this process large amounts of energy are released, which keeps the sun shining for billions of years (allowing live on earth in the first place). Our goal is to realize this process on earth and with create a save, unlimited, sustainable, and environmentally friendly energy source for all mankind in the future.

Structure:

The lecture was split in two parts: Part 1: Self-introduction and general information about my home country Germany. Students could ask questions about this first part and then we had a short break to refresh. After the break we started Part 2, which centered on the motivation, basic principal and status of our research. At the end, there was additional time for students to ask questions about this topic.

The lecture was a great success in my opinion. The students at Okazaki High School demonstrated a high level of English understanding and speaking. Even more so, I was very impressed by their interest in the lecture and their desire to ask questions. I can only give my greatest compliments to the students and teachers as I am very happy how the lecture went.

I sincerely hope that the students could enjoy the lecture and maybe learn something interesting. As a foreigner, I felt very welcome and I hope the students have someday the opportunity to visit other countries, including Germany.

- Language used (使用言語): English

- Lecture format (講演形式): Power Point presentation in front of class

◆Lecture time (講演時間) 90 min (分), Q&A time (質疑応答時間) 60 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))

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))

No interpretation - English only

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

No accompanying person

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

Very successful !

- 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。):

No accompanying person