

様式 A-1  
(FY2023)

2023 年 7 月 11 日

## サイエンス・ダイアログ 実施報告書

1. 学校名・実施責任者氏名: 都立科学技術高等学校・澤田淳
2. 講師氏名: Dr. Beatriz MARTINEZ MONTESINOS
3. 講義補助者氏名: 河口 允孝 様
4. 実施日時: 2023年7月7日 (金) 12:40 ~ 14:20
5. 参加生徒: 1 年生 62人(合計 62人)  
備考: 科学技術科
6. 講義題目: 火山噴火ダイナミクス再現の数値研究
7. 講義概要: 研究分野の概要と紹介、バックグラウンドと実物を見せての説明
8. 講義形式:  
☒ 対面 ・ ☐ オンライン (どちらか選択ください。)
  - 1) 講義時間 70 分 質疑応答時間 10分
  - 2) 講義方法 (例: プロジェクター使用による講義、実験・実習の有無など)  
プロジェクターでのスライド、実物(溶岩)による説明他
  - 3) 事前学習  
有  
使用教材 講師が挙げたキーワードを事前に周知
9. その他特筆すべき事項:

Date (日付)

(Date/Month/Year: 10/07/2023)

## 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): Beatriz Martinez Montesinos (ID No. P22759)

- Name and title of the accompanying person (講義補助者の職・氏名)

Masataka Kawaguchi

- Participating school (学校名):

Tokyo Metropolitan High School of Science and Technology in Koto Ward, Tokyo

- Date (実施日時): (Date/Month/Year: 07/07/2023)

- Lecture title (講義題目): Volcanology

- Lecture format (講義形式):

◆ ☒ Onsite ▪ ☐ Online (Please choose one.) (対面・オンライン) ((どちらか選択ください。))

◆ Lecture time (講義時間) 60 min (分), Q&A time (質疑応答時間) 30 min (分)

◆ Lecture style (ex.: used projector, conducted experiments)

(講義方法 (例: プロジェクター使用による講義、実験・実習の有無など))

We used a projector, and brought a collection of volcanic samples that the students could see and touch

- Lecture summary (講義概要): Please summarize your lecture within 200-500 words.

We gave a brief introduction to the Japan Society for the Promotion of Science and the Science Dialogue program. Then we talked about our origins, our background, our institution and my motivation to come to Japan. After that we gave some notions of volcanology, explaining why volcanoes are formed, the different types of eruptions and the dangers associated with each one of them. Next, we showed examples with videos of some volcanic eruptions. Afterward, we took a break for students to observe and touch some volcanic samples of ash, bombs, lava, reticulate and pumice from ancient Japanese and Hawaiian volcanic eruptions. During this break time, we walked around the room to individually explain to each student some information about the samples they had in their hands at that moment and they had the opportunity to ask us questions. Next, we explain that volcanology can be approached from different disciplines that help each other to advance in the assessment of volcanic hazard. Therefore, focusing on numerical modeling, we then introduced the physical, mathematical and computational description of the evolution of an eruptive column and explained the need for numerical codes and supercomputers to estimate volcanic hazard. Finally, we dedicated time for questions and answers.

