

様式 A-1
(FY2024)

2025年 1月 23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: 静岡北中学校 関大貴、菊田貴之
2. 講師氏名: Dr. Minsu Han
3. 講義補助者氏名:
4. 実施日時: 2025年 1月 23日 (木) 13:30 ~ 15:00
5. 参加生徒: 3年生 71人、 年生 人、 年生 人 (合計 71人)
備考: (例: 理数科の生徒)
6. 講義題目: Nanoarchitecture : Atomic-Level Control of Materials
7. 講義概要: 講師自身の生き立ちと研究者を志した動機、実際に研究に携わっている分野についての講義
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 75分 質疑応答時間 15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)
プロジェクターを使用して、対面による講義
 - 3) 事前学習
☒ 有 ・ ☐ 無 (どちらかに○をしてください。)
使用教材 本校作成のワークシート
9. その他特筆すべき事項:

Form B-2
(FY2024)
Must be typed

Date (日付)
24/01/2025 (Date/Month/Year: 日/月/年)

Activity Report -Science Dialogue Program-
(サイエンス・ダイアログ 実施報告書)

- Fellow's name (講師氏名): Minsu Han (ID No. P24047)

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

- Participating school (学校名): Shizuoka Kita Junior・Senior High School

- Date (実施日時): 23/01/2025 (Date/Month/Year: 日/月/年)

- Lecture title (講義題目):
Nanoarchitecture: Atomic-Level Control of Materials

- 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) 75 min (分), Q&A time (質疑応答時間) 15 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))

Seminar using a projector

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

On January 23, I gave a presentation at Shizuoka Kita High School on the concept of nanotechnology and its ability to control atoms. Since most of the audience members were 14 or 15 years old, I focused on how science is applied to our daily lives, what nanoscience is, and how nanotechnology impacts our lives. To capture their interest at the beginning of the presentation, I shared detailed information about myself and Korea. Having experienced various aspects of Japanese culture in Korea, I felt I could relate to the students, and indeed, they showed great interest in the comics and animations I mentioned.

I also gave a brief presentation on how I became a scientist, hoping that my research journey would inspire students who aspire to pursue science. To emphasize the importance of science education, I highlighted that science is always happening around us. For example, I explained why we feel colder after swimming and the working principle of soap, making these concepts relatable and easy to understand.

I introduced the nano world by explaining its scale and providing an overview of nanotechnology. To spark further interest, I shared examples of nanotechnology in nature and briefly discussed my current research. The detailed discussion about my research seemed too difficult and hard for the

students to understand. I concluded the lecture by presenting examples of nanotechnology applied in real-life scenarios.

After the lecture, we had a Q&A session where the students asked a variety of interesting questions about Japanese culture, Korean culture, and nanotechnology. I was pleased to see that the students had listened to my lecture attentively.

Many students listened to the lecture enthusiastically, which made the experience enjoyable for me. To facilitate their understanding, I wrote down key terms in Japanese, which I believe was highly effective. The lecture was divided into two sessions: a 30-minute lecture followed by a 15-minute break, and then another 30-minute session.

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

Teachers have told me that it was very helpful to have words written in both English and Japanese. I'm sure it would be helpful to ask future presenters to indicate in Japanese.

I thought that listening to a lecture in English for more than 30 minutes might be difficult and tiring for the students. Overall, I believe dividing the lecture into shorter segments (around 30 min) with breaks was an effective approach.

The teacher who assisted with the lecture occasionally explained parts of my presentation to the students in Japanese, which was also very effective.

- Impressions and comments from the lecture assistant (講義補助者の方から、本プログラムに対する意見・感想等がありましたら、お願いいたします。):