

Form B-2
(FY2020)
Must be typed

Date (日付)
25/05/2020 (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): Bin Wang (ID No. P19077)

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

No

- Participating school (学校名): Fuki Prefectural Wakasa High School (福井県立若狭高等学校)

- Date (実施日時): 22/05/2020 (Date/Month/Year: 日/月/年)

- Lecture title (講義題目):

An Introduction of Earthquake Engineering

- Lecture format (講義形式):

◆Lecture time (講義時間) 100 min (分), Q&A time (質疑応答時間) 10 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))

Online Zoom class by PPT

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

Because of the pandemic of COVID-19, the school has been closed. I gave an online lecture by Zoom.

For this class, I introduced three parts of the Earthquake Engineering: "What is an earthquake", "Damage to structures", and "Seismic protection technologies for the structures". First, I explained what causes earthquake and how to measure the earthquake size when an earthquake occurs. More specifically, two types of body earthquake waves—the P-wave (a compressional wave) and the S-wave (a shear wave) were explained by two animations. Based on the basic knowledge, the students can understand the working principle of the earthquake early warning system and the forces induced by the earthquakes.

The damage of different structural systems and the seismic protection technologies were further explained. Although each type of passive energy dissipation device acts to dissipate energy, its mechanism leads to distinctly different hysteretic behavior. I also told the students that although we have developed mature seismic design philosophy to protect people's life, the high-performance structural systems with resilience and sustainability need to be developed to meet

the requirements of modern society.

Many thanks for the English teacher Junko Shibuya of Fuki Prefectural Wakasa High School to give me more helps to contact the students.

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

None

- Impressions and comments from the accompanying person (講義補助者の方から、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