Form B-2 (FY2022) Must be typed Date (日付) <u>25/January/2023 (Date/Month/Year:日/月/年)</u>

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): <u>KAI</u>	PRATHU ANJALI	(ID No.	P22039)
- Name and title of the lecture assistant(講義補助者の職・氏名) NIL			
- Participating school(学校名): Toyama Prefectural Senior High School			
- Date (実施日時): 2023 January 24th (Date/Month/Year:日/月/年)			
- Lecture title (講義題目): <u>New Insights into Chemistry: Chemistry in everyday life & Catalysis</u>			
 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) <u>90 min (分)</u>, Q&A time (質疑応答時間) <u>15 min (分)</u> ◆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))			

Powerpoint presentation (using projector)

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

In my lecture, I started by sharing my story, research experiences so far and a little bit of the country's introduction and culture. The lecture began with the fundamentals of chemistry, the role of chemistry in every day life and intordced periodic table. Then I talked about the fundamentals of catalyst, catalysis process and importance of catalysis in industrial applications. For example, the significance of fuel and energy production, ammonia synthesis method. Then i introduced about the bio-mimicking catalysts by taking Porphyrin and Cytochrome p450 as an examples.

After explaining the basics of these I displayed a video on the importance of chemistry and catalysis applications in real life. Then, I briefly showed my research on the design of porphyrin based catalysts and its application in various organic transformation. Then I discussed about the government strategy and significance of achieving carbon-neutral in future how chemists can contribute to achive this goal. For example, by developing highly efficient chemical processes

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for the conversion of biomass to bio fuel and NH3 synthesis using renewable sources. I also discussed the scope of chemistry and how to enroll for research and future job scopes. Finally, we had a free talk for about 15 min and finished the lecture on time. The students were quite responsive and were asked questions and discussed the content of the lecture and future scopes in chemistry.

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

None

- Impressions and comments from the lecture assistant (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。):