（学校用）

様式 A-1
(FY2024)

2024 年 6 月 10 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：お茶の水女子大学附属高等学

2. 講師氏名：Dr. Chethika Gunsairi

3. 講演者所属：東京大学　未来ビジョン研究センター

4. 講義補助者氏名：無し

5. 実施日時：2024 年 6 月 4 日（火 ） 15:15 ～ 16:15

6. 参加生徒： 1 年生 16 人、 2 年生 11 人、 ___年生 ___人（合計 ___人）
   備考：（例：理数科の生徒） 放課後に希望者のみが出席

7. 講義題目：アジアの都市における水質汚染管理　Managing Urban Water Pollution in Asian Cities

8. 講義概要：限りある資源である水を効率的に使用するために水のリサイクルを目指すスキームの提案と、そのケーススタディの紹介および自分が研究者になるまでの道のりの紹介

9. 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 40 分　　質疑応答時間 20 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）
   プロジェクター使用による講義

   3) 事前学習
   有 （どちらかに〇をしてください。）
   使用教材 PPT を事前配布

10. その他特筆すべき事項：
    特にありません。

Form B-2
(FY2024)
Must be typed

Date（日付）
（10/06/2024：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）: Chethika Thamarasi Gunasiri Wadumestrige Dona
（ID No. P23775 ）

- Name and title of the lecture assistant（講義補助者の職・氏名）
None

- Participating school（学校名）: Ochanomizu University Senior High School, Tokyo

- Date （実施日時）: 04/06/2024 （Date/Month/Year: 日/月/年）

- Lecture title（講義題目）:
Managing urban water pollution in Asianc cities

- 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） 50 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））
Used projector

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

The lecture began with a self-introduction where I shared details about myself, my country, and my educational background. This helped establish a connection with the audience and provided context for the subsequent discussion. I then transitioned to explain my ongoing research activities in Japan, focusing specifically on urban water pollution. I delved into the pressing issue of urban water pollution in Asian cities, highlighting the main sources of this pollution. These include industrial discharge, domestic wastewater, and runoff from agricultural activities. To provide a comprehensive understanding, I discussed different types of water: clean water, gray water, and black water, clarifying their distinctions and relevance to urban settings.

One of the key points of my presentation was the potential of wastewater as a resource. I explained how wastewater, rich in nutrients, can benefit plant growth, and how using wastewater for irrigation can contribute to sustainable urban development. This section emphasized the

multiple benefits of wastewater irrigation, including its role in reducing the strain on freshwater resources and promoting urban agriculture. The presentation also underscored the importance of managing wastewater in urban poor areas, which are often significant sources of water pollution, particularly in Asian cities. I highlighted how my research explores the use of urban agriculture as a decentralized water management strategy. By treating wastewater in underserved settlements, urban agriculture can effectively address both pollution and food security issues.

Using a detailed flow chart, I explained the methodology of my research. This study aims to assess the feasibility of using treated wastewater for urban agriculture in low-income communities. The research involves using treated wastewater for irrigation and treated sludge as fertilizer, offering a sustainable solution for urban water management. I shared insights from my fieldwork in Sri Lanka, illustrating my research with photographs. The final part of the lecture was dedicated to providing tips for students on becoming successful scientists, offering guidance that could help them in their future careers.

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

Students were so interested to learn about water pollution issues and Asia and how urban agriculture can be used as a startegy to mitigate it.

- 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。）:


Managing Urban Water Pollution
in Asian Cities
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