

OUTLINE Group H Session⑧～⑬ 〈2nd half〉 AM11:45～

H12

広島大学附属福山中・高等学校／Hiroshima University Junior and High School, Fukuyama

都市・地方間におけるごみ処理循環型システムの検討

日本国内における一般廃棄物の処理費用は、令和5年度時点で年間約2.3兆円に達し、施設の老朽化やごみの量の増加に伴う維持管理費の上昇が課題となっている。本研究では、岡山県真庭市における生ごみの分別・液肥化の取り組みを分析し、都市と地方の資源共有による連携で、さらなるコストの削減と資源利用可能な生ごみの拡大が期待できると考察した。これを踏まえ、地域間で資源を循環させるごみ処理システムを提案する。

A Study on a Circular Waste Management System between Urban and Rural Areas

The increasing cost of general waste disposal in Japan, approximately 2.3 trillion yen as of 2023, has become a critical issue for governments due to aging facilities and the growing volume of waste. This study analyzed the method developed in Maniwa City, Okayama, through which organic waste is separated and converted into liquid fertilizer. It was found that stronger collaboration between urban and rural areas in a shared resource cycle could further reduce costs and increase the availability of recyclable organic waste. This result illustrates a circular waste management system connecting regions.

H13

長崎県立長崎東中学校・高等学校／Nagasaki Prefectural Nagasaki Higashi Junior and Senior High School

AIのカラー化技術を活用した戦争記憶の継承と平和の推進

被爆者が年々減少しているなか、戦争記憶の継承が課題になっている。そこで、戦前の長崎の白黒写真をAIでカラー化し、被爆者への質疑や実地調査を行い、真実の色に近づくよう修正するなかで、平和への造詣を深めた。カラー化した写真的展覧会を開催し、写真集を作成し国内外に普及を行った。カラー化することで過去を感じ、平和を「自分ごと化」できることに繋がったという多数の意見が上がり、新たな伝承法を開拓できた。

Preserving War Memories and Promoting Peace through AI Colorization Technology

As the number of atomic bomb survivors continues to decline, preserving memories of the war has become a pressing issue. In response, we used AI to colorize prewar black-and-white photographs of Nagasaki. Then, by conducting research and interviews with survivors, we could adjust the colors to accurately reflect history, and deepen our understanding of peace. We held an exhibition of the colorized photographs and created a photo book. Many viewers commented that the colorized images made the past feel closer, helping them internalize the importance of peace. This demonstrates that AI colorization can pass down memories of war.