

Title of Research: 24-5-08

Study on Risk-Based Grading of Recycled Plastic and its Application for Enhancing Plastic Recycling

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Summary of Research:

Promoting plastic recycling is an increasingly important issue from the perspective of resource recycling and preventing plastic pollution. Quality of recycled plastic left undefined, although it is acknowledged as very important. This study aims to develop an approach to risk-based grading of recycled plastics, which will contribute to the implementation of risk assessment and management of plastic recycling and resource recycling in the supply chain. We assumed that the risks associated with the use of recycled plastics come from plastic chemicals such as plastic additives, contaminants, and by-products contained in plastics. A risk-based grading approach for recycled plastics has been developing by conducting a trial grading of recycled plastics based on a risk assessment framework for chemicals contained in plastics.

Timeline:

March 1, 2024-

Topics:

The presentation entitled "Study on Risk-Based Grading of Recycled Plastic and its Application for Enhancing Plastic Recycling" was held in JCIA LRI Annual Workshop 2024

Publications:

Kyoko Ono, Masashi Gamo, Isamu Ogura, Naohide Shinohara, Naoya Kojima
"An attempt to establish risk-based recycled plastic grades to enable appropriate plastic recycling"
Society for Risk Analysis Annual Meeting 2024, Austin, Texas, USA (2024/12), Poster presentation.