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The plastics industry is expected to develop viable and practical solutions that increase the proportion and use of high-quality recyclates. A new generation of stabilizer systems, which we have developed specifically for the special requirements of recyclates, is available to improve the quality of recyclates. Another focus is on minimizing odors with customized odor-control additives."

Dr. Elke Metzsch-Zilligen
Board of Research | Fraunhofer CCPE
Head of Division Plastics | Fraunhofer LBF



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Emission and odor optimization in plastics and recyclates



The odor of recycled plastics is a major challenge for their recycling and requires customized solutions. Recyclates can have undesirable odors that come from various sources, such as microbiological degradation or residues of previous contents. This is precisely where the Fraunhofer CCPE compact on December 5, 2024, on the topic of "Emission and odor optimization in plastics and recyclates" comes in. Prof. Andrea Büttner, Board of Management Member of the Fraunhofer CCPE and Director of the Fraunhofer Institute for Process Engineering and Packaging IVV, provides initial answers to key questions in this interview.

[TO THE INTERVIEW](#)

News from the CCPE research

Odor control additives for the circular economy



Odors from plastics and plastic recyclates

We are introducing

Dr. Carl-Christoph Höhne from the Fraunhofer CCPE 'Smell' team



pose a major challenge for the circular economy. Additives that act as odor scavengers can provide a remedy. However, selecting the right additive is often difficult. Researchers at Fraunhofer CCPE have developed a new characterisation method that enables the identification of suitable additives for odor control.

[MORE INFO](#)

We are pleased to introduce Dr. Carl-Christoph Höhne from the Research Department "Circular Additives and Compounds". He is working on solutions for plastics with unpleasant odors. Here he is involved in the development of odor protection additives, including a novel characterization method and the concept of an "odor barrier layer", to improve the use of recycled plastics.

[MORE INFO](#)

New life for old plastics: Post-stabilization is the key to success



Post-stabilization of recyclates is crucial for quality assurance in the plastics recycling industry. Customized stabilizer systems can neutralize oxidative damage, which increases the reusability of polyolefin recyclates. This leads not only to better product properties, but also reduces the consumption of resources and promotes the sustainable use of plastics.

[MORE INFO](#)

Sports equipment with minimized CO₂ footprint



Design and functionality are key purchasing criteria for sports equipment and accessories. Unfortunately, products for this booming market are often made of ecologically unsustainable composite materials. But now a recyclable alternative has been developed from the biopolyester PLA.

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You can meet us here

December 5, 2024

**Fraunhofer CCPE compact
"Emission and odor optimization
in plastics and recyclates"**

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March 12 - 13, 2025

**Fraunhofer CCPE at the Circular
Valley Convention**

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November 20-21, 2024

November 28, 2024

Circular FoodPack Final Event

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