



Dear Sir or Madam,

Circular Economy is more than "a bit more recycling" - at Fraunhofer, we understand circular economy as the systematic transformation from a linear to a Circular Economy. To achieve this, we need all competencies: from materials, design, production to the use phase, from chemical, ecological to economic aspects, from recycling and IT to logistics. The fact that the Fraunhofer institutes involved in the CCPE cover these competencies well was confirmed to us in Spring 2021 in the interim evaluation with internal and external expert reviewers - motivated we are going into the second work phase of our application-oriented research on the Circular Plastics Economy.

The "Circular Readiness Level® (CRL®)" developed at the CCPE enables companies to test the extent to which principles of the Circular Economy have already been taken into account in their products and product systems. A first version of the self-test has been on the market since June. This and the methodology behind it will be presented to the interested public at the [Fraunhofer CCPE compact event](#) on October 28, 2021, starting at 2 pm. The event language is German. You can read more about this in the [newsletter article](#) below "Self-Check Circular Readiness Level: Your first step to the Circular Economy!".

Furthermore, you will find topic articles on plastic resistance to UV disinfection and new developments in PLA foams and CreaSolv® - a physical process for recycling - as well as our new position paper on chemical recycling.

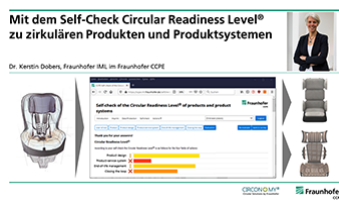
I wish you inspiration and enjoyable reading!

Best regards

Prof. Dr.-Ing. Uwe Clausen  
Board of Management / Director Division Systems  
Director Fraunhofer Institute for Material Flow and Logistics IML

## Self-Check CRL®: Your first step to the Circular Economy

The central challenge of the Circular Economy is the implementation of its principles at the product level. With the Self-Check Circular Readiness Level®, companies can check



how mature their product already is for the Circular Economy. Since June, the Self-Check has been available online as a tool for companies and will be presented to a professional audience for the first time at the online workshop Fraunhofer CCPE compact on October 28, 2021.

MORE INFO

## News from the CCPE research

Division Business  
**Sustainable foams with good flame retardancy**



Particle foams are widely used in the insulation sector and the packaging industry today. Polystyrene is predominantly used in this process. However, alternative more sustainable solutions do not meet today's flame retardant requirements. CCPE researchers at the Fraunhofer Institutes ICT and LBF are investigating whether sustainable particle foams exist at all.

MORE INFO

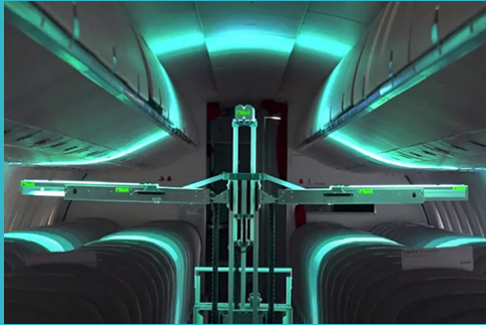
Division Systems  
**Inline quality monitoring for recycled polymers**



CCPE researchers are working on innovative physical plastic recycling processes that raise the quality of the recyclates to virgin material level or make previously unused plastic waste from plastic composites available for a second life. But how to guarantee the high quality level of the recyclates if the property profiles of the plastic waste used vary?

MORE INFO

Division Materials  
**Plastic resistance to UV disinfection**



The corona pandemic is a driver for the use of UV-C-based disinfection devices, e.g. in

Position paper  
**Recycling technologies for plastics**



The Fraunhofer Cluster of Excellence Circular Plastics Economy CCPE has

airplanes or supermarkets. In this process, various polymers are exposed to high-energy UV-C radiation. Therefore, the durability of plastic products to UV-C radiation is the focus of the current CCPE research.

[MORE INFO](#)

presented a position paper on the state of the art in science and technology of recycling technologies for plastics. The focus is on chemical recycling processes. A market analysis shows current industry activities. In addition, the Fraunhofer competence landscape in plastics recycling is presented in an overview.

[MORE INFO](#)

## You can meet us here

28 October 2021 from 14 pm to 16 pm

**Fraunhofer CCPE compact:  
Circular Readiness Level<sup>®</sup> – How  
mature is your product for the  
Circular Economy?**

[MORE INFO](#)

Save the Date: 19-26 October 2022

**Visit us at K 2022 in Düsseldorf,  
at the joint exhibition stand of the  
Fraunhofer-Gesellschaft.**

[MORE INFO](#)

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