Fraunhofer Institute for Process Engineering and Packaging IVV

Process development for polymer recycling

About this organisation

Machine translation

This organisation has been machine-translated based on data provided in German.

As an institute for applied research, we are leaders in the fields of process engineering and packaging. We create real added value on behalf of industry, government and science. The circular economy is a major challenge that we are facing up to. And we are already offering innovative solutions: With our patented solvent-based recycling process, for example, we recover high-quality plastics from post-consumer waste.

The Process Development Polymer Recycling department develops concepts and processes for high-quality plastics recycling from post-industrial and post-consumer waste. With the solvent-based recycling process developed at the institute, the Fraunhofer IVV offers a recycling process with particularly high cleaning performance, so that even plastics from composites and contaminated post-consumer waste can be processed into high-quality and pure polymers. Gentle processing makes it possible to produce recyclates with virgin material properties. Fibre-reinforced plastics or other plastic composites are frequently used in lightweight construction in particular, which often cannot be recycled using conventional recycling processes. Solvent-based recycling is a suitable solution for this.

Fraunhofer IVV

Organisation type
Non-university research institution

Sectors
No specific sector

Employees
250 up to 499

Turnover
€10m - €50m

Funding

Giggenhauser Str. 35
85354 Freising
Bavaria
Germany
www.ivv.fraunhofer.de

Main areas covered	Recycling, Polymer recycling, Plastics
Infrastructure	Recycling plants
Certifications	
Keywords	Plastic recycling
Memberships	

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Overview of lightweighting expertise

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	Research	Development	Manufacturing & Supply
Offer			
Products			
Services & consulting Consulting, Testing and trials, Technology transfer	✓	✓	
Field of technology			
Design & layout			
Functional integration			
Measuring and testing technology			
Modelling and simulation			
Plant construction & automation			
Recycling technologies Downcycling, Material separation, Recycling, Upcycling	✓	✓	

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Overview of lightweighting expertise

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	Research	Development	Manufacturing & Supply
Manufacturing process			
Additive manufacturing			
Coating (surface engineering)			
Fibre composite technology			
Forming			
Joining			
Material property alteration			
Primary forming			
Processing and separating			
Textile technology			

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	Research	Development	Manufacturing & Supply
Material			
Biogenic materials			
Cellular materials (foam materials)			
Composites Aramid fibre composites, Basalt fibre-reinforced plastic, Glass-fiber reinforced plastics (GFRP), Carbon-fiber reinforced plastics (CFRP), Metal-fibre-polymer composite, Natural fibre reinforced plastics (NFRP), Laminates, Particulate composites, Textile-reinforced concrete	✓	✓	
Fibres			
Functional materials			
Metals			
Plastics Thermoset plastics, Elastomers, Thermoplastics	✓	✓	
Structural ceramics			
(Technical) textiles Yarns, rovings, Meshes, Laid webs, Crocheted fabrics, Woven fabrics, Knitted fabrics, Nonwovens, mats	✓	✓	

Contacts

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