Process development for polymer recycling

About this organisation

Machine translation

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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.

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

Main areas Recycling, Polymer recycling, Plastics

Fraunhofer Organisation type Non-university research institution Sectors No specific sector **Employees** 250 up to 499

Turnover €10m - €50m

Funding

Memberships	
Keywords	Plastic recycling
Certifications	
Infrastructure	Recycling plants
covered	Necycling, Folymer recycling, Flastics

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			A C A i
	Research	Development	1anufacturing & 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 **Machine translation** This organisation has been machine-translated based on data provided in German. Manufacturing **Development** & Supply Research **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	N Development	/Janufacturir & 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,	✓	~	

Contacts

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Contacts		
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