

A unique , fully commercialised, Chemical PET Recycling Process

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revalyu Resource GmbH has spent several years perfecting and commercialising a highly efficient process which is able to chemically reverse engineer used plastic (PET) bottles into high quality PET polymer (ester). This ester can be used to replace conventional polymers derived from crude oil.

The first commercial facility is based in Nashik, India and is a continuous process currently operating in excess of 35 tonnes per day (approximately 4 million bottles a day). The plant seamlessly converts used PET bottles directly in high grade filament yarns for the textile industry by passing the need to first make rPET chips. However if required, the plant is also capable of producing rPET chips which can be extruded using standard processes.

The presentation will discuss the chemical process used, the lessons learnt and steps taken to build and operate the plant. It will also discuss the strengths and weaknesses of this technology compared to traditional mechanical recycling of PET bottles and the range of products which can be made from the ester.