

Emerging Innovative Technologies: Novel Fermentation and Downstream Processing Innovations
chemicals via fermentation
ChainCraft
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Agrifood Residues
Open-culture Fermentation
Biobased Fatty-Acids

Abstract:

ChainCraft is a Dutch scale-up focusing on the development and production of high-quality, sustainable biochemicals (fatty acids) through a unique fermentation process that upcycles food residues (e.g. fruit and vegetable cuttings) via a non-GMO, proprietary fermentation process.

In 2018, ChainCraft realized a commercial demonstration plant in the Port of Amsterdam, with an annual production capacity of 2K tonnes of fatty acid salts for the animal feed industry. ChainCraft will further scale-up its operations with a first of its kind factory in The Netherlands scheduled for commissioning in 2027. This new facility will produce approximately 20K tonnes of pure medium chain fatty acids for a range of different industries. In 2024, ChainCraft & Royal Avebe, a global leader in potato-based starch & protein innovations, announced a huge step towards a strategic collaboration by entering into a Heads of Agreement. This partnership will focus on upcycling Avebe's residual potato juice into high-value circular fatty acids and fertilizers through ChainCraft's innovative technology.

ChainCraft's products offer formulators in multiple industries a sustainable and local alternative to petrochemical or palm oil derived fatty acids. These fatty acids can be used in a variety of existing and new applications in a.o. animal feed, lubricants, plasticizers, home care, personal care, paints & coatings, and flavors & fragrances.

ChainCraft technology contributes to SDG 12, 13 and 15.