



Session	Alternative and Unconventional Feedstocks
Title	Waste to value: Transform mixed waste into valuable monomers using specialised microbial communities
Company	17Cicada Ltd
Speaker	Patricia Parlevliet
Keywords feedstock (max 2)	Mixed plastic
Keywords technology (max 2)	Industrial biomanufacturing
Keywords End-Product (max 2)	Sustainable monomers
Abstract:	
17Cicada's solution to global pollution is to use microbial consortia to convert mixed, end-of-life waste into microbial biomass in a cost-effective biomanufacturing platform that produces fossil-free chemicals for high-performance bioplastics. Unlike conventional approaches dependent on food-grade sugars, our technology platform leverages waste streams that would otherwise burden environmental systems, thereby turning liability into opportunity. By using tailored microbial biomass as feedstock for continuous fermentation of our first product, the monomer FDCA, 17Cicada's technology enables manufacturers to decarbonize supply chains without compromising performance or profitability. Our bio-created compounds serve as replacements for fossil-derived chemicals for a wide range of industries, such as high-performance plastics for coatings, 3d printing and electronics packaging. 17Cicada, a spin-out from the University of Nottingham, is led by a multidisciplinary team comprised of a distinguished synthetic biologist, experienced entrepreneurs with significant corporate industry backgrounds, and a finance specialist. This management team is unified by a shared commitment to promoting a healthier environment for future generations.	