



Session	Microbial proteins and microbial oils transition players
Title	Tune up oil production using fungi
Company	LipiTune GmbH
Speaker	Marcel Mann
TRL	TRL 4 - 7
Keywords feedstock (max 2)	sugar-containing side-stream
Keywords technology (max 2)	Precision fermentation
Keywords End-Product (max 2)	Tailor-made oils
Abstract:	
LipiTune develops tailor-made microbial oils with tunable fatty acid profiles as functional and scalable alternatives to conventional plant oils. Our fermentation platform uses a novel fungal production organism with high lipid productivity and a broad substrate spectrum, combined with a proprietary tuning technology that enables the fatty acid composition of the oil to be adjusted to specific product requirements while maintaining high batch-to-batch consistency. This allows us to design oils for applications where functionality, quality and supply security matter, with an initial focus on cosmetics and personal care. Fermentation-based production additionally offers sustainability benefits through reduced land-use pressure, regional and resource-efficient manufacturing, and the use of suitable sugar-containing side streams as feedstocks, supporting more resilient and circular value chains. LipiTune has established the technology at laboratory scale and is now advancing process optimization, downstream processing and scale-up toward industrially relevant volumes. By combining a flexible oil platform with scalable bioprocessing, LipiTune aims to provide industry with a new generation of high-performance, fermentation-derived lipid ingredients.	