



Session	Emerging Innovative Technologies: Novel Fermentation and Downstream Processing Innovations
Title	Omega-3 and protein rich microalgae from food waste.
Company	Greentech innovators
Speaker	Ingmar Høgøy
Keywords feedstock (max 2)	Food waste
Keywords technology (max 2)	Fermentation Hydrolysis
Keywords End-Product (max 2)	Fermentation Media Omega-3
Abstract:	
We give waste a value by converting food waste to fermentation media to be used in a number of fermentation processes like microalgae rich in healthy omega-3 oils and protein, mycelium or lactic acid for bioplastic or bioethanol. In Greentech Innovators we have developed a solution utilizing all types of food waste. We are reducing Greenhouse gas emission compared to all the traditional waste solutions like landfills, incineration, composting and biogas. We have produced in pilot industrial scale and documented our product to be excellent in several fermentation processes at pilot customers. We are solving a global problem, and food waste is emitting 9 % of CO2 emission and landfills are emitting 11 % of Methane emission. With our solution we are reducing CO2 emission by 204 kgs pr t waste compared to composting and 2600 kgs pr t Omega-3 rich oil compared to fish oil. We are increasing global food production and reducing GHG emission.	