

The client

We are working with a company that specialises in the research, development, production and sales of value-added components obtained through the extraction, isolation and purification of compounds from raw materials. Sustainability is key to their business and they are interested to identify **“green” / sustainable manufacturing approaches that they could adopt for producing triglycerides (i.e. beyond the extraction of triglycerides from agricultural crops), preferably with fatty acid chains between C8 – C24.**

The search

Our client is actively searching for technologies and approaches for manufacturing sustainably-produced triglycerides of saturated carbon chains between C8 – C24.

Examples of technologies of interest include (but are not limited to): -

- Production of triglycerides:
 - Fermentation and extraction of triglycerides from oleaginous microorganisms (e.g. microalgae, yeast, bacteria, fungi)
 - Cell-free biosynthetic pathways (e.g. enzymatic)
 - Catalytic production of triglyceride and triglycerides precursors and building blocks e.g., glycerol and fatty acids
- Carbon / hydrogen capture and generation methods for use as feedstocks for making triglycerides
 - Utilisation of CO₂ and other carbon sources such as waste / by-products (e.g. free fatty acids and glycerol) or other renewable feedstocks
 - Electrical photosynthesis
 - Sustainable sources of hydrogen for chemical synthesis

Ideally, the potential solutions would have the following benefits: -

- Use of inexpensive feedstocks
- Low energy and/or water consumption
- Minimises waste production
- Demonstrated proof-of-concept

Industries that may have relevant technologies include biofuel and sustainable fuels, food and beverage, consumer healthcare, personal care, green chemicals, biorefineries.

What the client can offer

The client has global processing operations with well-established customer base and market access. The client is open to exploring different ways of working with technology developers ranging from collaborative research and development projects for earlier-stage technologies; to licensing of technology with high technical readiness; and longer-term investment (e.g., joint-ventures or mergers / acquisition).

Please provide details of any potential technology partner or service provider to Diane Kolonko via diane@strategicallies.co.uk