The client

Our client is an **established manufacturer of FMCG (fast moving consumer goods) products incorporating a range of flavourings** (e.g., fruit, herb, botanical or synthetic versions). Flavour molecules with high volatility and a low boiling point (e.g., esters and lactones) tend to evaporate from the product even at ambient temperatures, leading to loss of the desired flavour profile over time.

To **extend the 'freshness' and shelf life** of these products it is desirable to protect and stabilise the flavour compounds through encapsulation. Some traditional methods of encapsulating aromas and flavours (e.g., spray drying) require the use of high temperatures which can also lead to loss of volatile compounds and poor encapsulation efficiency. However, recently a number **of alternative encapsulation approaches have been developed that operate at low temperatures**, and are therefore suitable for use with volatile flavours / aroma molecules.

The search

The client is actively seeking **suppliers of low temperature encapsulation technology** and/or **technical support relating to the use of these systems for encapsulation of flavours / aromas**.

Desirable partner characteristics:

- Suppliers of low-temperature (<60°C) spray-drying technology or other low-temperature encapsulation technologies for use with highly volatile compounds e.g., esters / lactones (technology *must be commercially available*), and/or
- Service providers offering product development support for the above
- Experience working with volatile flavours / aromas such as esters and lactones, and provision of encapsulation inclusion rate data
- R&D and pilot plant (up to 1kg) facilities to support development work
- Analytical capabilities e.g., for measuring inclusion rate

Desirable technology characteristics:

- Access to (commercially available) low-temperature encapsulation technologies
- Operation at low temperatures (ideally < 60°C, but at least below 100°C)
- The ability to produce micron scale powders, granules or capsules (maximum diameter 1mm)
- Applicability to a range of encapsulation matrices
- Moisture stability (end product will contain some liquid)
- Continuous operation preferred
- Evidence of product safety (e.g., for food use)
- Scalable (to tonnes/year ultimately)

What the client can offer

Our client is looking for companies that will become trusted partners. The client is open to exploring different ways of working with technology developers starting ideally with collaborative research and development projects; and ultimately exploring other approaches such as licensing of technology with high technical readiness, joint-ventures or technology purchase. Please provide details of any potential technology partner or service provider to Diane Kolonko via diane@strategicallies.co.uk.