

## **BIOCHEM show case**

# **Develop a route to ODA from renewable raw materials**

## **Problem**

Octadecenedioic acid (ODA) is a versatile ingredient in cosmetic applications. A key property is the lightening of skin and is used in creams to event out the tone of complexions and treat skin pigmentation disorders by stopping the biosynthesis of melanin. However the ingredient is very difficult to access commercially via conventional chemistry.

## **Technical solution**

British speciality chemicals company Croda developed a biotransformation of oleic acid, a fatty acid found in various animal and vegetable sources, to ODA.

Croda invested in production scale fermentation facilities which were constructed at their manufacturing site in Widnes, UK in 2009. The new plant will have a high-flexibility in handling various pH environments and high salt concentrations, which will make it future-proof.

## **Benefits**

- **Renewable feedstock**
- **Mild, low impact process**
- **Natural ingredient**

## **Further information**

Croda personal care <http://www.croda.com/>