

# Adding value to the inulin production process

Production of pharmaceutical ingredients from existing product streams



**Project:** CS-10-20  
**Project Leader:** Frank van de Manakker  
**Researchers:** May Young Lin, Inaki Arruabarrena Guirao  
**E-mail:** frank.vandemanakker@feyecon.com  
**Partners:** FeyeCon, Sensus (Royal Cosun), Avebe, NL GUTS  
**Budget:** 67 k€

## Objective:

Preparation of pharmaceutically attractive ingredients from inulin (and related) production streams.

## Motivation:

Improving profitability and resource efficiency of the inulin production process and related food ingredient production processes.

## Project scope:

Isolation and purification of active pharmaceutical ingredients from existing by-product streams (1).  
 Prepare pharma grade inulin product from food grade starting material (2).

## Applicability:

FeyeCon's sustainable technologies based on carbon dioxide (CO<sub>2</sub>) are applied in a wide variety of industries, such as pharma, food, and cosmetics.

## Advantages:

- Fast and flexible processing steps
- Clean and solvent-free end products
- High production yields
- Straightforward upscaling
- Non-polluting / less waste

## Results:

### Sensus

- Stream 1 bio-active compounds cannot be extracted
- Stream 2 bio-active compounds extracted successfully seems economically feasible

### Avebe

- Extraction results promising

