

# Delivering a Faster Filtration at Pilot Scale of a Cyclodextrin Complex

## The challenge

Our customer's API was formulated as a cyclodextrin complex to address thermal and oxidative instability. However, filtration at pilot scale was very slow.

## How?

CatSci's fully integrated chemistry, material science, formulation and analytical science teams gathered a thorough package of solubility and solution stability data. The process was thoroughly baselined using the Crystal16, the Blaze probe and a lab scale filtration rig. The process was redesigned to improve filtration.

## The achievement

Through CatSci's thorough work:

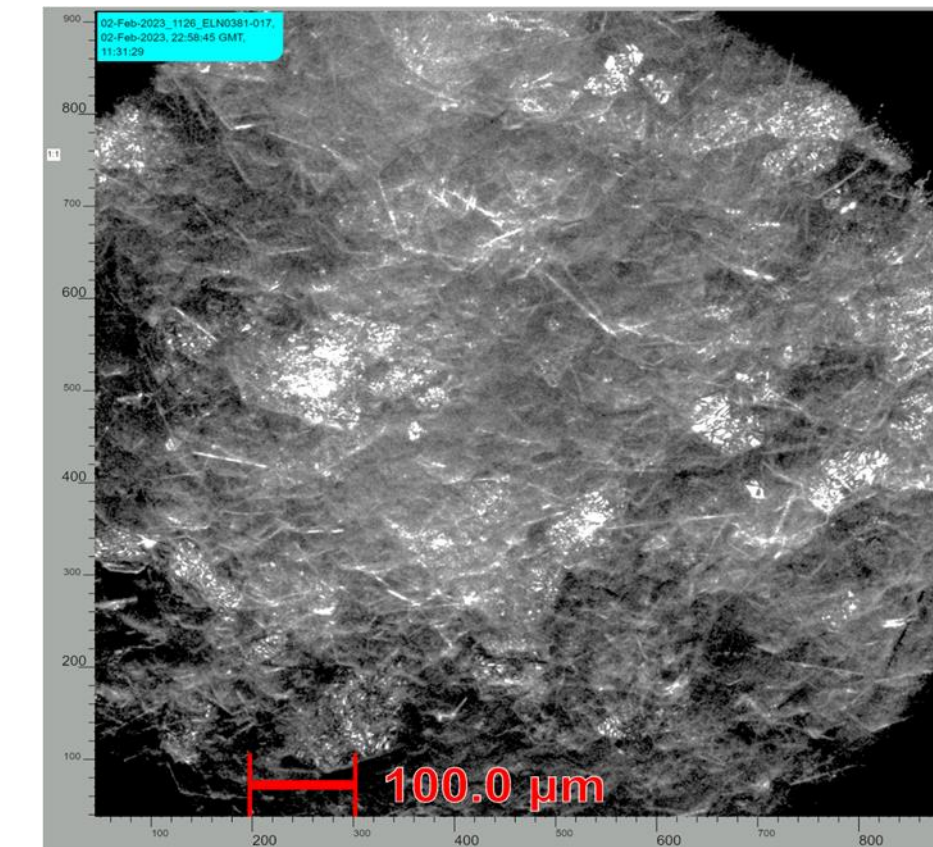
- Filtration times at pilot scale were much reduced.
- The need to improve yield was highlighted to the customer.
- The customer gained critical understanding of impurity generation and purging.



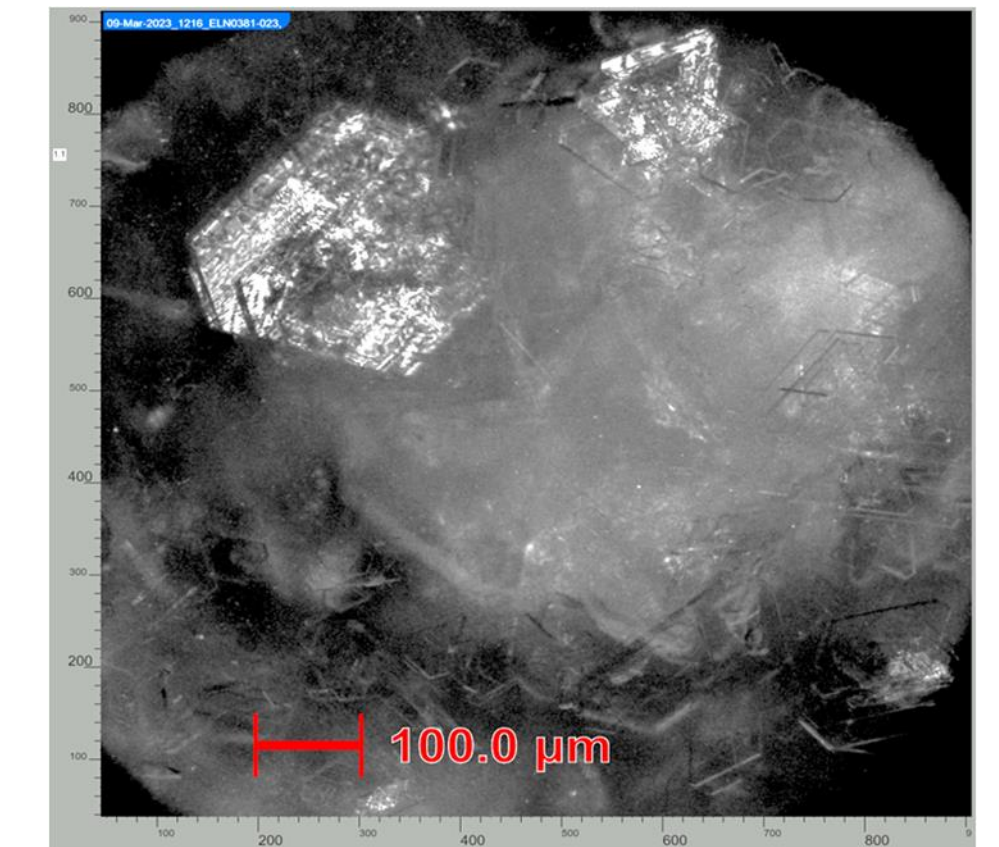
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Images from the Blazemetrics probe, before and after the baseline process

Before improved process



After improved process



Filtration rate

