

Croda collaboration wins major awards

NiTech's technology enables companies to reduce costs *and* emissions as part of their Net Zero strategy. We are therefore delighted that Croda's success in this area has been recognised with two major awards:

- ❖ The [2023 Process Intensification Award](#) for Industrial Innovation from the [European Federation of Chemical Engineering](#)
- ❖ The [Innovation Award](#) from the UK's [Chemical Industry Association](#)

Croda's commitment to sustainability and innovation led it to implement NiTech's continuous reactor technology at commercial scale:

- ❖ Cycle times were reduced from 10 hours to just 2 minutes
- ❖ Footprint was reduced by 66% along with a 99.5% reduction in working mass of the plant
- ❖ Annual savings of 360 tonnes of water and 580 tonnes of steam are also now possible



A large-scale production unit is now operating successfully at one of Croda's sites. The innovative, breakthrough technology has not only solved space constraints, but has also doubled production in the existing factory set-up.

Importantly, the new technology reduces CO₂e by 86 tonnes/year, the equivalent of charging 9,000 electric cars, via better operating efficiency.

It can also be operated in small, modular units aligned with market needs, with new investment added on a modular basis to match sector growth.

Dr Will Davies, NiTech's CEO, added:

"The technical and commercial success of this project is an important validation of the benefits that can be created with our continuous processing technology.

"It demonstrates the power of collaboration between technology provider and end-user. We are delighted Croda have received this recognition."

Find out more from [our case study here](#) to see how NiTech's technology enabled Croda to achieve sustainable and smart manufacturing.

NiTech out and about

NiTech's CEO, Dr Will Davies, will be joining a panel discussion on 'Sustainability in Manufacturing' at the [Scottish Manufacturing & Supply Chain Conference](#) and Expo, to be held on 25 October at the Scottish Event Campus in Glasgow.



Around 4,000 delegates will attend the event, which connects key stakeholders across Scotland's manufacturing and engineering supply chain, including energy, renewables, transportation, aerospace/space, defence, food and drink, and biopharma, among others.



Meanwhile, NiTech's Process Development Chemist Ruaraidh Wells will be presenting at the 2nd International [Conference](#) on Catalysis and Chemical Engineering, taking place in Paris, France, on 9-10 November.

His presentation is entitled 'Continuous production of a functional consumer care product through process innovation' and is based on the Croda project.

Ruaraidh also attended the third [International Conference on Applied Science and Engineering](#) in Paris last month. His paper focused on the 'Continuous crystallization of energetic materials using continuous oscillatory baffled crystallizer'.

Continuous crystallization of paracetamol

Find out more about NiTech's crystallization technology from this webinar presented by Dr Davies and Daniel Ward, senior research chemist with our partner Nalas Engineering, at the Mettler-Toledo Scale-Up Seminar on 28 June.

The presentation details a case study on the successful continuous crystallization of paracetamol using NiTech's oscillatory baffled crystallizer.

Access the webinar [here](#).