

NiTech pilot unit at GE Healthcare for €11.5m EU SIMPLI-DEMO project

NiTech's DN32 pilot-scale continuous oscillatory baffled crystallizer (COBC) has just shipped to GE Healthcare in Norway. It is a core technology for the €11.5m EU [SIMPLI-DEMO](#) project.

The project aims to enhance the competitiveness of the European specialty chemicals industry. Its focus is on supporting the transformation of chemical manufacturing from batch to continuous at NASA/EU TRL 7 level.



NiTech's DN32 pilot-scale unit

SIMPLI-DEMO – or the Demonstration of Sonication and Microwave Processing of essential chemicals project – aims to advance the sustainable and competitive production of chemicals and materials. It focuses on supporting companies in the specialty chemicals and pharma industries to move from batch to continuous and modular production.

The 4-year project involves a consortium of European industrial companies, research institutes and universities. It focuses on the synthesis of specialty polymers and particles for use in a variety of every-day products, including insulation, paints and coatings, plastics, catalysts and health applications.

Continuous is critical for manufacturing

Paul Hodges, NiTech's executive chairman, discusses how continuous chemistry enables companies to achieve their Net Zero goals, by enabling them to dramatically reduce emissions and costs. Please click [here](#) to read the analysis, which was published by Chemistry & Industry magazine in January 2024.



CatContiCryst ready for next stage

The CatContiCryst project, a collaboration between NiTech, [CPI](#), and the [University of Sheffield](#), has successfully demonstrated a continuous manufacturing process for a key material used in cathode active materials (CAMs), including single-crystal cathode (SCC) batteries.

SCC batteries are poised for major growth in Electric Vehicles, due to their ability to increase range and battery life, while also reducing charging time.

Using a continuous process, the project team succeeded in manufacturing material with an electrochemical performance comparable with relevant reference materials, both in terms of specific discharge capacity and capacity retention.



Electric Vehicles are seeing exponential growth

CatContiCryst was funded by the UK Research and Innovation's Faraday Battery Challenge, which aims to build a high-tech, high-value British battery industry. We are now seeking interested partners to take this innovative technology to the next stage.

Contact us as sales@nitechsolutions.co.uk to find out more and participate in CatContiCryst's potential.

New member of leadership team



Niall Moffat has joined NiTech Solutions as our new Director of Finance.

Niall has 20 years' experience in strategic finance and management roles, supporting commercial development and funding requirements for growth.