

NiTech's novel technology can help meet urgent carbon emission targets

Climate change is a critically important issue for all manufacturing businesses, given the need to reduce CO₂ emissions and become climate neutral. BP's decision to target [zero net growth in operational emissions by 2025](#) highlights the pressure that is now building from consumers, legislators and investors to ensure that the world becomes climate neutral by 2050. The upcoming EU [Green Deal](#) will clearly increase this pressure still more.

NiTech's low-cost and highly efficient reactors and crystallisers can play an important role in helping to meet climate targets, as a UK [Engineering and Physical Sciences Research Council Report](#) highlights. Key benefits include significant reductions in energy consumption due to their smaller scale, and the ability to install ancillary equipment in close proximity. This can significantly reduce energy consumption – giving a substantially lower carbon footprint and lower costs.



The Report notes that one major pharma company that applied continuous manufacturing to its operations cut its overall carbon footprint by 52%. It also reduced chemicals waste disposal by 10%, while reducing water consumption by 83% and solvent use by 42%.

Please contact our CEO, Will Davies, to discuss how we can help you to reduce CO₂ emissions and costs, while also improving yield and product quality.

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Reducing cost and CO₂ emissions

NiTech has launched a new video to provide more details on this important topic.

Click [here](#) to view.



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... enabling distributed manufacturing

Biomethane project using NiTech reactors wins award

Prof. Sandra Esteves, Professor in Bioprocess Technology for Resource Recovery: Energy and Materials and her team have been awarded the [‘Best Impact on the Economy’](#) award at the 2019 annual USW impact awards for their ‘BioGrid’ project, which is funded by the Department for Business, Energy and Industrial Strategy (BEIS).



The project uses NiTech’s patented continuous process technology combined with innovative biotechnology to convert industrial waste CO₂ to produce products including ‘green’ methane gas.

The award recognised the potential economic impact from capturing and utilising just 10% of the CO₂ produced by the UK power and industrial sectors, to produce methane with a value of more than £1bn annually.

The handbook of continuous crystallisation

NiTech’s founder and chief scientific officer Xiong-Wei Ni has written a chapter in this [handbook](#), published last week by the Royal Society of Chemistry. Authored by Nima Yazdanpanah and Zoltan Nagy (Professor of Chemical Engineering, Davidson School of Chemical Engineering, Purdue University – a NiTech development partner), it presents fundamental and applied knowledge, paying attention to application, scale-up and process intensification.



Hemp & CBD Expo

Come and meet the NiTech team at this [event](#) for the UK CBD industry. It is being held on 29 February-1 March 2020 at the NEC in Birmingham, UK. The event is an ideal opportunity to discuss how our technology can support the manufacture of CBD isolate. Email: george.butcher@nitechsolutions.co.uk