

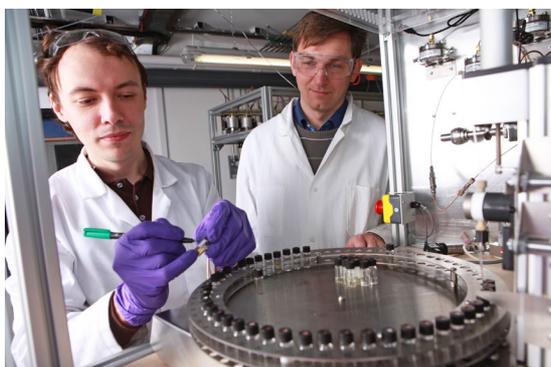
Stoli Catalysts – cutting fine chemical manufacturing costs in half

Stoli Catalysts has developed a transformative catalysis technology that will enable the £600 billion Fine Chemicals industry to convert from batch to continuous flow, thereby potentially halving its production costs.



Technology overview

The platform technology of catalyst-coated tube reactors has the potential to revolutionise the market allowing for safer, lower pressure and more efficient manufacturing of perfumes, vitamins, food supplements, pharmaceuticals and other specialist applications in a more cost-effective way. It cuts the capital costs required for plant and equipment, it reduces energy needs, and it can provide a higher purity end product. Coating of catalysts onto the inside of tubular flow reactors delivers significant cost reductions (20-80%) using 100-1000 times less precious metal, reducing working capital. It is estimated that approximately 80% of the addressable market can be serviced with a standard range of 20 tube types, and the company has already developed 15 of these at lab scale.



The Company

Stoli Catalysts was spun out of the University of Warwick's School of Engineering in 2017 following development of the technology with a £2m European Research Council grant.

The two founders, Dr Nikolay Cherkasov and Professor Evgeny Rebrov, also took part in Innovate UK's ICURe programme, which enabled them to validate the applications of their research in the marketplace. Dr Cherkasov was recently awarded an Enterprise Fellowship by the Royal Academy of Engineering to support the translation of his research to Stoli Catalysts.

The CEO, Lawrie Matthews, is the former Global Chemicals Business Development Manager at Johnson Matthey.

Next Steps

There has already been significant commercial interest with early multinational customers commissioning development projects. With a €1.2 million European Innovation Council SME Instrument grant the company can now move from lab-scale projects to building a small-scale plant for pilot continuous flow production. Stoli Catalysts has set up facilities on the University of Warwick's Wellesbourne campus and is hiring four new chemical engineering developers and expanding its commercial team.

It is now raising £600k to build up the team and accelerate manufacturing and business development.

For further information please visit: www.stolicatalysts.com or contact: info@stolicatalysts.com

FUNDING TO DATE

2011 – ERC Proof of Concept - £2m
2016 – ICURe funding - £50k
2017 – Mercia Technologies convertible loan – £50k
2019 – EIC SME Instrument grant – €1.2m

Patents:

WO-2017220590
WO-2019057609