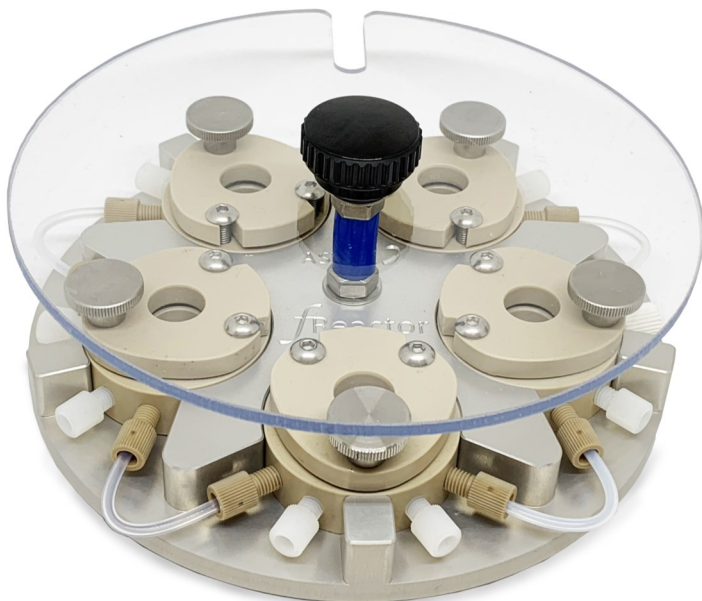


# Asynt



# *f*Reactor™

...one for every lab



Unlocking the Power of

## Continuous Flow Chemistry

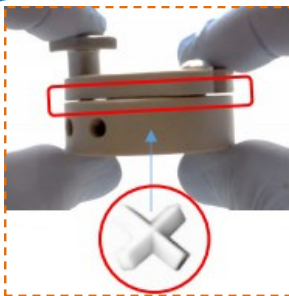
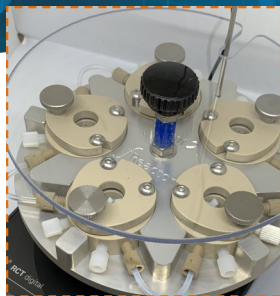
Designed by chemists and engineers from within the Institute of Process Research and Development, University of Leeds, the affordably priced *fReactor* is simple to assemble and modify, making it suitable for a wide range of continuous-flow processes.

Integrating the efficiency of pipe-flow processing with the advanced mixing of a CSTR, the *fReactor* delivers a general “plug-and-play” setup which is well-suited to multiphase reactions; allowing chemists to explore continuous-flow processing, with little expertise required.

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## Reactor Information

Type of reactor	Cascaded continuous stirred tank reactor
Number of stages	5
Total assembled reactor volume	10 ml
Individual stage volume	2 ml
Pressure rating	100 psi (6.89bar)
Entry ports:	4 x 1/4-28 flat bottomed ports per module to take standard flangeless fittings
Material: Base	PEEK as standard, others by request
Material: Window	Toughened glass
Material: Seal	Viton as standard, others by request

## Chemistry: Example Reactions

<b>Heterocyclization:</b> NaOH-promoted cycloisomerization reaction of N-propargyl 2-aminopyridinium bromide with extraction of product to an organic phase, and in-line separation	<i>Liquid to liquid-liquid including inline separation</i>
<b>Crystallization:</b> diastereomeric crystallization of Salsolidine and (S)-Mandelic Acid	<i>Liquid to liquid-solid</i>
<b>Hydrogenation:</b> Triphasic Hydrogenation of Nitrobenzene	<i>Gas-liquid-solid</i>
<b>Oxidative Biocatalysis:</b> alcohols and amines oxidized to produce a range of aldehydes and imines	<i>Liquid (liberating gas byproduct)</i>

*Further examples available via the website below*