



## *f*Reactor Flow Chemistry Platform

*f*Reactor was developed by the University of Leeds and Asynt Ltd to offer an affordable entry point into the world of flow chemistry. *f*Reactor provides an expanding platform of intuitive and flexible flow reactors for the development of materials and synthesis routes.

The fReactor system utilises apparatus you may already have in your laboratory. Heating and mixing are provided by a standard magnetic hotplate stirrer and fluidic pumps are used to drive the reagents around the modules.

Flow chemistry is a process whereby reactants are continually pumped into a reactor and product continually leaves.

There are many different types of reactor available and these are often temperature and pressure controlled, providing advantages over batch and microwave chemistry.

#### Benefits include...

- Faster reactions
- Improved reaction selectivity
- Safer, more controllable reactions
- Rapid optimisation
- Easier scale-up options
- Promotes green, sustainable chemistry





We also offer a dedicated fReactor website to help you set up all your equipment and get started in flow chemistry.

Listed within our online library there are a number of publications utilising fReactor, including examples of single and multiphasic reaction systems such as:

- Enzymatic biotransformations
- Synthesis of N-Chloroamines
- Oxidative biocatalysis
- Crystallization
- Hydrogenation



# Asynt2

#### **FReactor** UNIVERSITY OF LEEDS Intuitive and simple to use

fReactor is the brainchild of Professors John Blacker and Nikil Kapur from the University of Leeds, UK.

Their backgrounds in Chemical Engineering and Process Chemistry have shaped fReactor into an intuitive and simple to use tool that is a welcome addition to anyone looking to access flow chemistry.

leactor

...one for every lab



fReactor is rated for operation at up to 7 bar pressure and heating to 100 °C.

Each **f**Reactor module is manufactured from PEEK as standard and includes a toughened glass window for observation.

### Popular Purchase Options

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**ADS22-KIT:** *f***Reactor Classic Complete Kit:** Includes heating plate with safety shield & 5 x *f*Reactor Classic modules (1.8 mL each, PEEK) with fittings.

**NEW ADS23-KIT:** *f***Reactor MAXI Complete Kit:** includes heating plate with safety shield & 5 x fReactor MAXI modules (7.5 mL each, PEEK) with fittings.

Both *f*Reactor Classic and *f*Reactor MAXI now available in Hastelloy, for increased chemical compatibility. Please contact us for further information.



#### Reactor<sup>™</sup>

Find out more about fReactor and the many advantages of flow chemistry via our YouTube channel.

We are continuously working together with The University of Leeds to add further tools and options to the fReactor platform.



**To keep up to date** with new additions, and be first to hear about our future webinars, please register your interest at:

www.asynt.com/register-your-interest/fReactor