

## Performing Gas Liquid Chemistries in a Controlled Manner

Using a **Uniqsis FlowSyn™** flow reactor system - **Sygnature Discovery (Nottingham, UK)**, a leading provider of integrated drug discovery services to the pharmaceutical industry, has reported results demonstrating how the system allows them to perform traditionally hazardous chemistries in a controlled manner.



For example, using the proprietary FlowSyn technology with a Uniqsis GAM II gas-liquid reactor, laboratory scientists at Sygnature Discovery, in conjunction with Uniqsis, have developed high pressure reaction protocols that have enabled them to reproducibly perform carbonylation chemistries under continuous flow through conditions.

Dr Daniel Hamza, a senior research chemist at Sygnature Discovery commented "The option to use a gas addition module has opened up a multitude of gas-liquid reaction chemistries that we can perform using our FlowSyn system". He added "The FlowSyn is a straightforward and robust piece of kit to operate. The ability to add on new reactors to the existing set-up is of particular benefit since the latest technology can be easily incorporated into our synthetic plans". In conclusion Dr Hamza said "Flow chemistry offers many advantages over traditional batch processing methods notably better reproducibility and scalability as well as enhanced safety, particularly with hazardous reactions such as nitration and carbonylation".

Sygnature Discovery ([www.sygnaturediscovery.com](http://www.sygnaturediscovery.com)) is a leading provider of integrated drug discovery services to the global pharmaceutical industry. Key areas of expertise include medicinal and synthetic chemistry, computational chemistry and bioscience (in vitro biology and screening). Sygnature's team of over 60 industry-experienced chemists and biologists add considerable value to its clients' drug discovery activities by undertaking complete drug discovery programmes and key elements of the drug discovery process, such as hit finding, hit-to-lead and lead optimisation. Sygnature's scientists also provide considerable intellectual input into clients' projects; thereby generating novel intellectual property.

Uniqsis specialises in the design of meso-scale continuous flow chemistry systems for a wide range of applications in chemical and pharmaceutical research. The company's aim is to make flow chemistry easily accessible to both novices and experienced users.



For further information on the FlowSyn flow reactor system please visit [www.uniqsis.com/paFlowSystem.aspx](http://www.uniqsis.com/paFlowSystem.aspx) or contact Uniqsis on +44-845-864-7747 / [info@uniqsis.com](mailto:info@uniqsis.com)