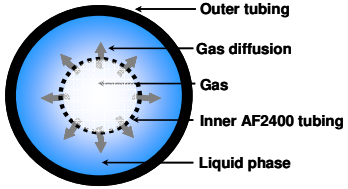
Gas-liquid flow chemistry

Tube-in-tube Gas Addition Modules

Tube-in-tube gas-liquid reactors provide a safe and efficient means of performing gas-liquid reactions under continuous flow conditions. They utilise a gas-permeable fluoropolymer inner tubing through which a wide range of gases can rapidly diffuse into the surrounding liquid phase.



GAM I Pre-saturation Module

Although designed primarily as a module to provide a solvent feed that is pre-saturated with gas, the GAM I can be used a ambient temperature as a flow reactor. It has an integrated gas management manifold.

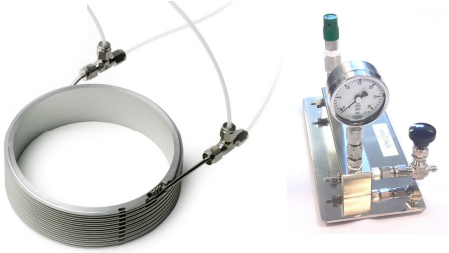
GAM II Coil Reactor

In the GAM II, the tube-in-tube concept is incorporated into a standard Uniqsis coil reactor. This can be either heated or cooled, and gas is now supplied 'on-demand' directly to the reaction mixture to improve throughput.
The outer tubing is stainless steel for safety and to ensure optimal heat transfer.

To facilitate gas management, an optional Gas Manifold is also available.

- Safely and reproducibly perform gas-liquid reactions in flow.
- Perform gas-liquid reactions at elevated or sub-ambient temperatures.
- Economical use of expensive gases.
- Compatible with FlowSyn, Cold Coil and Polar Bear *Plus* Flow.

Gas Addition Module GAM I



Gas Addition Module GAM II
with optional Gas Manifold