Introducing the Vapourtec easy-Photochem System
'Bringing Photochemistry to the Bench'

The Vapourtec easy-Photochem is a comprehensive, yet easy-to-use system that aims to bring photochemistry to every synthetic chemistry lab.

Photochemistry is a powerful under-utilised synthetic technique. Recently there has been resurgence in interest in photochemistry due to its ability to provide novel structures and alternative, greener synthetic routes. In developing the easy-Photochem, Vapourtec's aim is to bring photochemistry out of the hands of dedicated expert users and make the technique easily and safely available for synthetic chemists.

Key Features of the easy-Photochem

- Continuous flow photochemistry
- Safe and fully enclosed lamps
- Space saving compact design
- Integrated UV reactor and pumps
- Two independent pump channels
- Fully chemical compatible pumps
- Second reactor position
- Intuitive touch panel interface
- Either UV lamp or LED sources
- User selectable UV power
- Light source wavelength filtering
- Temperature control -5°C to 80°C
- Easy to use and affordable

Continuous Flow Photochemistry

Traditional batch photochemistry techniques have proven limitations, flow photochemistry provides improved control and safety profiles

- Reaction products leave the reactor after exposure to the UV light source
- Reactive intermediates generated by UV exposure can be immediately fed into a second reaction step
- UV exposure times are precisely controlled and consistent
- UV penetration depth is not an issue as the thickness of the fluid being irradiated is 1.5mm
- The photochemical reaction can be scaled simply by running the process for longer
- The maximum volume of the reactor is only 10ml, the hazard of maintaining a large volume of solvent in close proximity to a high temperature lamp is significantly reduced

Call +44 (0)1284 728659 or email info@vapourtec.com

Safe and fully enclosed lamps

The light source within the easy-Photochem is totally enclosed, allowing for safe operation in a standard laboratory fume cupboard.

The power supply is interlocked to ensure power is safely disconnected under any conditions out of the designed parameters.

Compact Design

The compact size means that the easy-Photochem occupies the minimum of fume cupboard space. The system can be easily moved from one location to another.

Wavelength Filtering

A range of band-pass filters are available to ensure your reactants are only exposed to the desired wavelengths. Filters are quickly and easy changed.

Temperature Control

The reactor temperature can be set between -5°C and 80°C with a 1°C resolution. Cooling is provided by the Vapourtec cooling module.

Selectable, Intense UV Lamp

At the heart of the easy-Photochem is a compact, high intensity medium pressure metal halide lamp or high power LED source. The shrouded lamp, made especially for Vapourtec is designed for dimmable operation without compromise.

- Controlled lamp power from 75W – 150W
- Lamp power is continuously monitored and logged
- High power LED sources having precise output, available in 365nm, 395nm, 405nm, 420nm, 450nm, 480nm and 500nm