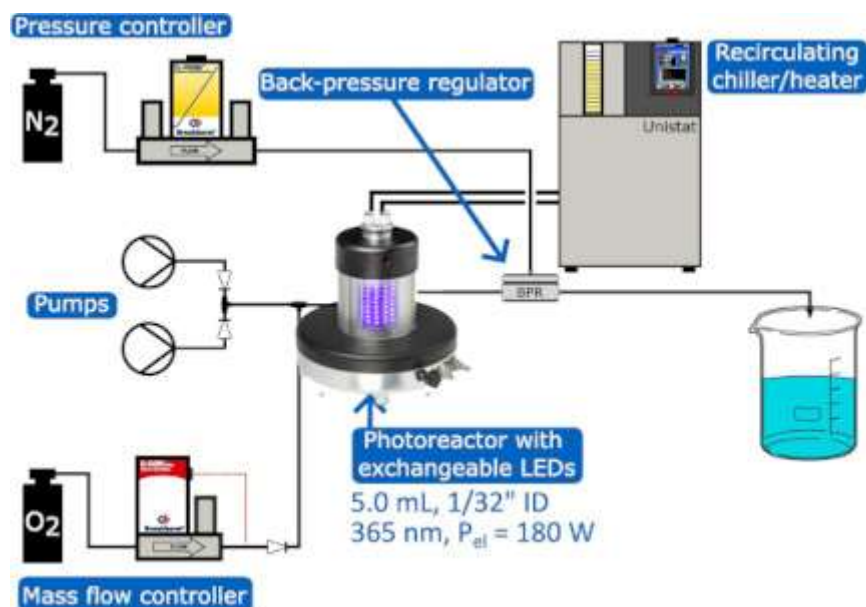


Publication 77: Optimization of Gas–liquid Photochemical Reactions using an Automated Flow Platform



Stevens, Dorbec et al. have developed an automated continuous flow-through platform based around a Borealis Flow photoreactor capable of optimising photocatalytic gas-liquid flow processes.

A Bayesian optimisation approach was used to enable a 14-fold increase in productivity for the oxidation of tetralin.

Studies on a further 9 substrates showed the platform to be a useful tool for reaction optimisation and process intensification.

[S. Desimpel, J. Dijkmans, K. P.L. Kuijpers, M. Dorbec, K. M. Van Geem, C. V. Stevens, Chemical Engineering Journal, 501, 157685](#)