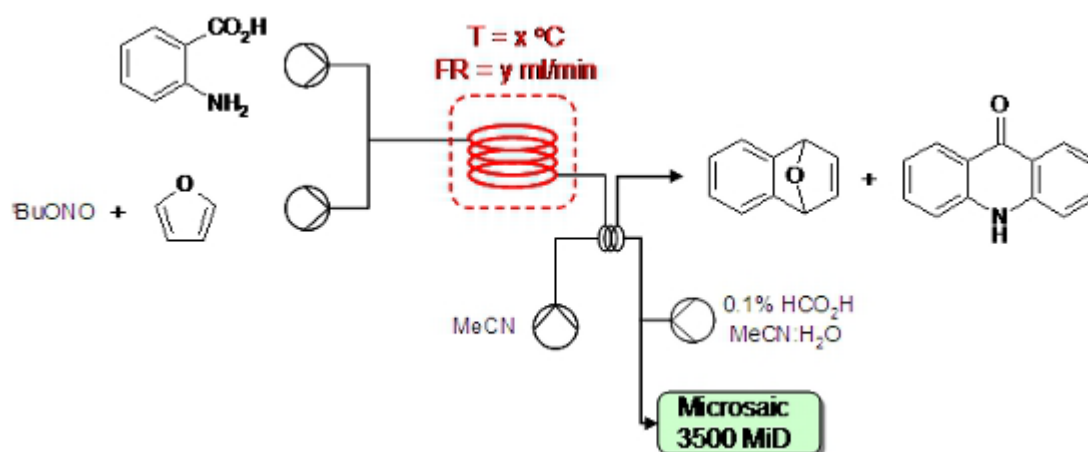


Publication 21: Continuous Flow Reaction Monitoring using a Miniature On-line Mass Spectrometer



A revolutionary new miniature ESI mass spectrometer has been used to directly monitor on-line the products emerging from a mesoscale flow synthesiser.

In this way, it was possible to observe unstable reaction intermediates and by monitoring trends in selected ion peak heights it was possible to quickly identify optimal reaction conditions for synthesis of the desired reaction product.

In general, this approach provides a detailed and informative snapshot of a flow-through chemical process. Analysis by on-line MS is usefully complementary to alternative methods of both on-line and in-line monitoring of flow chemistries.

[D. L. Browne, S. Wright, B. J. Deadman, S. Dunnage, I. R. Baxendale, R. M. Turner, S. V. Ley, Rapid Commun. Mass Spectrom., 2012, 26, 1999.](#)