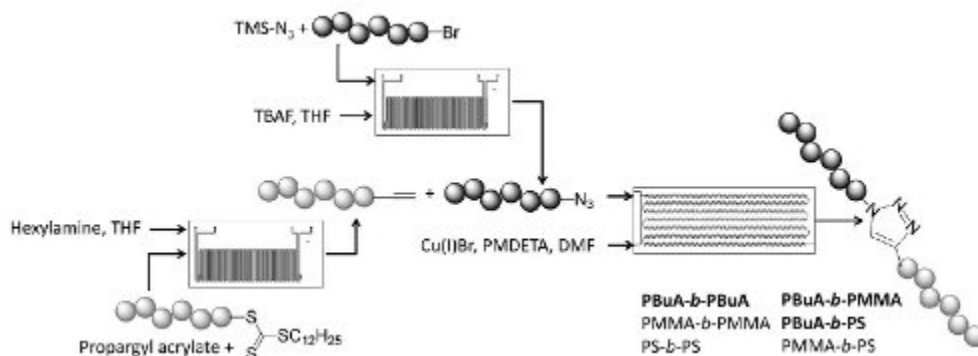


Publication 54: Polymer Conjugations via “Click” Chemistry Employing Microreactor Technology



A microreactor system was used to prepare end-cap modified polymers (alkynes and azides) which were then employed in block co-polymerisations using a triazole linking group prepared under copper catalysed 'Click' conditions.

Good coupling efficiencies are observed and notably whereas the corresponding batch process takes several hours to reach completion the flow process is complete in only 40 minutes.

The results indicate that the use of a continuous flow reactor for end group modifications as well as click reactions has clear benefits towards the development and improvement of well-defined polymer materials.

J. Vandenberg, T. Tura, E. Baeten, T. Junkers, J. Polym. Sci., Part A: Polymer Chemistry, 2014, 52, 1263–1274