New Synthetic Technology in Material and Drug Discovery

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Keywords: Combinatorial chemistry, Compound Library, Flow chemistry, Lab automation, Solid-phase synthesis

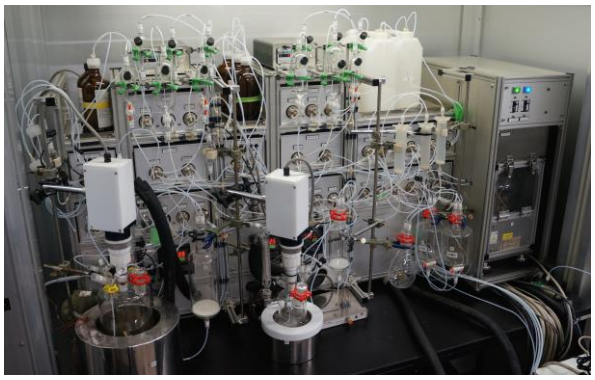
I. Abstract Body (up to 250 words)

New Synthetic Technology in Drug Discovery
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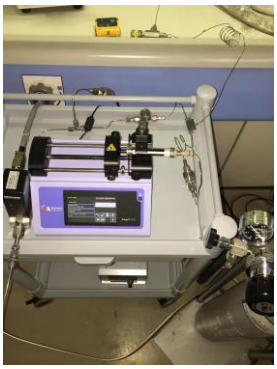
Automated synthesis and flow chemistry have attracted a great deal of attention in recent years because these process improve both the reproducibility and reliability of synthesis.[1] Development of automated synthetic procedures and storage of relevant digital data allow anyone to reproduce the same results anytime and anywhere using the same apparatus and reagents. As a result, synthetic chemists can spend more time on advanced and challenging problems. Automated synthesis and flow chemistry often enhance the safety profile of the synthetic processes.[2] Flow chemistry is effective for the hazardous reactions using toxic reagents or high pressure gases. Herein, we report the automated synthesis of taxol[3], enediyne[4], lewisX[5]and ketopiperazine analogues and the flow synthesis of peptides[6] and aliphatic aldehydes[7].

References

II. Image:







III. Reference:

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