Synthesis of Molecular Microarrays using a Photochemical Reaction Cell

Microarrays are versatile and widely used tools for high-throughput screening methods. Conventional light-directed synthesis of microarrays is a relatively inefficient and expensive process that is wasteful of raw materials.

Researchers at the University of Vienna, Faculty of Chemistry have improved existing synthesis methods by developing a unique flow cell that combines rapid, cost-effective synthesis with excellent sequence fidelity.

Applications

- Synthesis of biological molecule microarrays, such as peptide, DNA and RNA microarrays

Advantages

- Doubling of synthesis throughput
- A specially-adapted microfluidic photochemical reaction cell reduces the consumption and wastage of reagents
- Excellent sequence fidelity due to reduction of stray light reflections
Development Status

A prototype flow cell has been prepared and tested, with excellent results.

Intellectual property Status

US and European patent applications are pending.

Publications


Contact

To discuss licensing or collaboration opportunities please contact:
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