

## Microfabricated Fluidic Circuits: High Performance Chemical Separations and More

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The notion of microfabricating fluidic devices to perform chemical separations is now well over a decade old. The technology has transitioned from the embryonic stage of academic research to commercial development and implementation as products to address the needs of discovery research. The early work on microfabricated fluidic devices was focused on implementation of chemical separations procedures largely due to the backgrounds of those involved. The success of these early experiments lead to a much broader view of the Lab-on-a-Chip rather than just a miniaturized separation platform. Nonetheless, as in the conventional laboratory, chemical separations will remain an essential element of these new integrated laboratories. This presentation will attempt to discuss some of the early work from our laboratory, the advantages of performing chemical separations on microfabricated structures, and some prospects for new promising directions.

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