

---

# Organic Process

---

## Research &

---

## Development

---

Organic Process Research & Development 2001, 5, 91

### *Editorial*

---

I'm writing this editorial whilst at the Informex exhibition in New Orleans, organised by the Synthetic Organic Chemical Manufacturer's Association (SOCMA). Over 100 exhibitors testify to the wealth of the fine chemical industry, with most of the exhibitors involved with some aspects of custom synthesis, outsourcing, contract process R&D, and other services. What surprised me were the number of companies offering services in the environmental sector. As the trend towards fast-tracking of chemical processes from lab scale into pilot plant increases in pace, we end up with processes that—at least initially—are less volume-efficient (re: with poorer space–time yields) and more polluting than maybe would have been the case a few years ago. One exhibitor confided that he had been given a process by a major pharma company that produces only 6 kg of product for a 10,000-L reactor!

In contrast, another exhibitor was selling services including stream stripping of organic-containing wastewater streams with a low calorific value (which would otherwise have been incinerated). This methodology is particular suited to aqueous wastes contaminated with chlorinated solvents and other “priority pollutants”, where only the organic contaminant ends up getting burned.

In another booth, methods of recovering a wide variety of organic and inorganic byproducts for organic, solid, or aqueous streams were being promoted. Once extracted these byproducts could be converted to value-added products using carefully chosen reactants. Products which are suitable for this approach include phenols, mercaptans, acids, heterocycles, and inorganic nucleophiles, as well as alkyl and acyl halides.

The other service area which caught my attention was in large-scale chromatography with a number of companies offering facilities for custom separation of products (in-

cluding enantiomers) by large-scale chromatographic method, with simulated moving-bed technologies predominating.

I did not see too many services, however, associated with safety and hazard testing which was rather surprising. Many companies do not have adequate in-house facilities for rapid and effective thermal hazard testing so I would have thought this could have been a great opportunity to offer contract hazard testing. Of course, many contract manufacturers offer this service as part of the comprehensive package of custom synthesis or toll manufacture. However, it was clear in my discussions with small companies that many processes are still being scaled up without comprehensive thermal hazard testing.

I mentioned in last month's editorial that I would focus on a special Highlight, an incident (euphemism for runaway reaction) involving a nitro compound. Owing to the editor's heavy travel schedule in January, this will be held over for the next issue.

That particular issue (number 3 of 2001) will contain a special feature on automation in process R&D. Issue number 6 of 2001 will also be a special issue, focusing on continuous processing and process intensification in fine chemical processes. Contributions to this issue are currently being solicited—anyone wishing to submit an article to this issue (Nov/Dec 2001) should contact the Editors as soon as possible.

Trevor Laird  
*Editor*

OP010007G