



Johnson Matthey
Macfarlan Smith

chemical and analytical development

Macfarlan Smith offers a complete process and analytical development service to the pharmaceutical industry. A comprehensive package is available from early route selection through to bulk production and process validation.

Chemical Development

- Literature review and assessment of synthetic opportunities
- Development of new and existing synthetic routes for both known and new chemical entities (includes potents and natural product extractions)
- Process optimisation and scale up to kilo scale production

Analytical Development

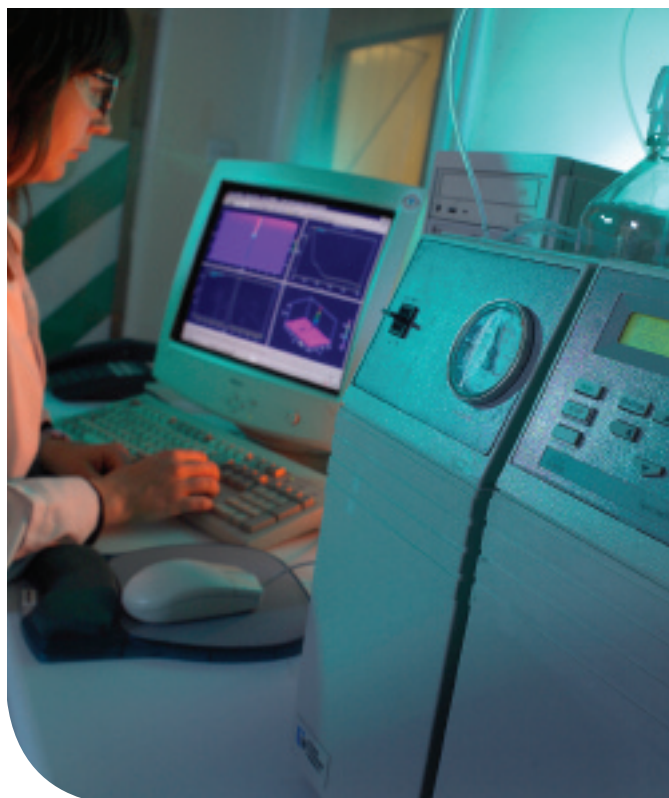
- Analytical method development
- Method validation and technical transfer
- Impurity profiling/identification/characterisation
- Reference standards
- Stability testing to ICH guidelines

Modern analytical capabilities include

- UV, FTIR, GLC, HPLC, NMR, particle size testing, full microbiological testing, XRPD, LC-MS, GC-MS, physio-chemical reaction hazard testing

Macfarlan Smith has access to a number of additional resources through the Johnson Matthey group.

- Extensive information services, including inhouse patents and intellectual property departments
- World class technology research centre
- Chiral technologies
- Process catalysts
- Catalytic screening and optimisation



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