

School of Physical, Environmental and Mathematical Sciences, UNSW Canberra

# Synthetic Organic Chemistry and Host-guest Chemistry

#### SPECIALISTS IN

Have been engaged in synthetic organic and organometallic chemistry for 30 years. We also a strong background in supramolecular chemistry in particular molecular host-guest chemistry. Have developed IP in the host-guest chemistry arena.

### THE TOOLS OF OUR TRADE

Fully equipped wet-labs for synthesis and purification. In addition, access to a full range of analytical instrumentation for complete characterisation and purity determination.

#### SELECTED RECENT PROJECTS

Synthesis of new and improved molecular containers such curcurbit[*n*]uril for improve drug delivery. Also drug modification, also for improved performance.

These improve

- Bio-availability
  - increased solubility
  - prevent aggregation
  - slow release
- Protection against biodegradation
  - improved stability
  - limit undesirable bio-reaction
  - reduce toxicity

Demonstrated in vitro, ex vivo and in vivo.

#### TRACK RECORD

We have had several industry research projects

- Reckitt Benckiser
- Syngenta
- AQDOT Cambridge
- Currently an external reviewer for the Australian Pesticides and Veterinary Medicine Authority
- Supplier of research compounds to Aldrich

## COMPETITIVE ADVANTAGES OF YOUR TECHNOLOGIES

- We are familiar with projects involving 'commercial in confident' material and we also understand the commercial imperative and a focus on results with minimal cost.
- We can work to stepwise targeted objectives with progress reporting at the conclusion of each step and then a final report.

#### **OUR EXPERTS**

Dr Anthony Day

7 PhD students

Research Assistance and a strong collaboration network.

