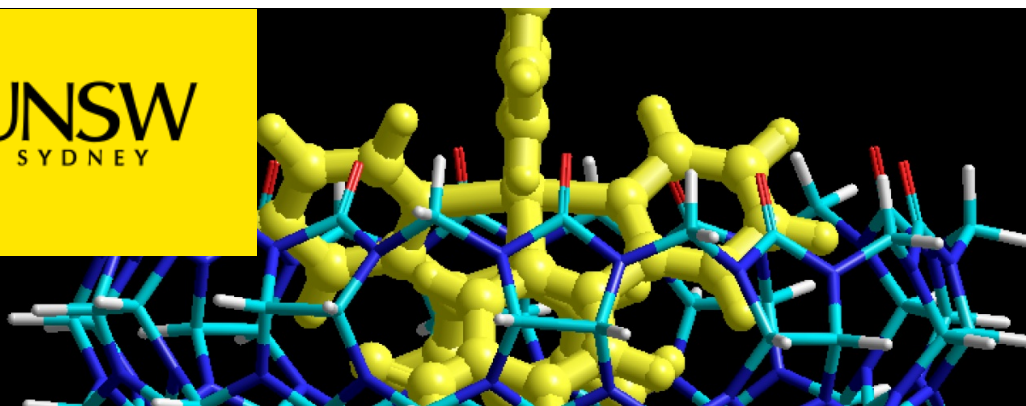




UNSW  
SYDNEY



## Supramolecular host-guest systems

**Cucurbituril, a supramolecular system unit developed at UNSW, is a robust host molecule that can be used in various applications, including drug delivery, asymmetric synthesis, molecular switching, and dye tuning**

### Competitive advantage

- Strong background in supramolecular synthesis and international expertise in molecular host-guest systems of cucurbituril for chemical property manipulation
- Expertise in energetic materials including analysis, detection and controlled degradation
- Suite of intellectual property protection

### Successful applications

- Supramolecular manipulation for improved IR countermeasure flares, Defence Science and Technology (DST)
- Safe degradation methods to cyclic peroxide base explosives, DST
- A sensor-reporter approach to explosive detection in aqueous environments via luminescence manipulation within molecular cages
- Environmental treatment of waste water from nitrotriazole (NTO) manufacture, DST

### Our partners

- Defence Science and Technology (DST)

### More Information

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