



TECHNOLOGY

The Inverted Cucurbit[n]uril Family

OVERVIEW

Cyclodextrins, molecular container compounds, are currently used extensively in industrial applications (\$24 million/yr. market) including the formulation of pharmaceuticals, chemical research, and sensor preparation. Similarly to the cyclodextrins, the cucurbit[n]uril family of container compounds bind to molecules with similar applications.

Currently used cyclodextrins have relatively poor characteristics such as weak complexes, fast dissociation of the complexes and challenges to selective derivatization. Researchers at the University of Maryland have developed novel inverted cucurbit[n]uril molecular containers. These new molecules have superior binding properties relative to the cyclodextrins and do not possess any of their deficiencies. As such, these unique inverted cucurbit[n]urils are poised to supplant the cyclodextrins as the molecular container of choice for a variety of applications.

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Additional Information

INSTITUTION

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PATENT STATUS

Patent(s) pending

LICENSE STATUS

Contact OTC for licensing information

CATEGORIES

- Chemical
- Drug delivery devices

EXTERNAL RESOURCES

- [US Patent 8,513,409](#)

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