Category

Synthesis of Materials and

**Key words** 

Unnatural Products

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T. WIXE, C.-J. WALLENTIN, M. T. JOHNSON, P. FRISTRUP, S. LIDIN, K. WÄRNMARK\* (LUND UNIVERSITY, SWEDEN AND TECHNICAL UNIVERSITY OF DENMARK, KONGENS LYNGBY, DENMARK)

Synthesis of an Orthogonal Topological Analogue of Helicene *Chem. Eur. J.* **2013**, *19*, 14963–14969.

## A Tubular Structural Analogue of Helicene

**Significance:** Helical molecular systems, both natural and unnatural, continue to capture the interests of chemists. Using an enantiomerically pure bicyclic moiety to appropriately place kinks into the system, Wärnmark and co-workers report the synthesis of helical structure **1**, an orthogonal topological analogue of helicene.

**Comment:** The synthesis of **1** is accomplished by repeated employment of a two-step set of reactions consisting of (1) ring-opening hydrolysis in acid and (2) Friedländer condensation with a chiral bicyclic ketone. By this strategy, monomer **2** is converted into ring-opened trimer **3**, which is converted into trimeric ketone **4**. Condensation of **4** and **3** affords the helical target **1**.

 SYNFACTS Contributors: Timothy Swager, Derik K. Frantz

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