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Title:	Nanoclusters of Cyanuric Acid
Authors:	Sathyamurthy, N. (/jspui/browse?type=author&value=Sathyamurthy%2C+N.)
Keywords:	Hydrogen bonding molecular clusters cyanuric acid self-assembly
Issue Date:	2017
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Citation:	Journal of Chemical Sciences, 129 (7)
Abstract:	In this article, the self-assembly of cyanuric acid (CA) molecules into nano-structures is examined. Equilibrium geometry of CA is planar and it belongs to the D _{3h} point group. It is shown that CA clusters form three dimensional bowls and balls. Cyclic pentamer (5-bowl) is the basic motif responsible for these non-planar geometries. It is also shown that the cyclic hexamer based clusters can be non-planar if they contain a 5-bowl. A unified criterion for the formation of bowls and balls from basic molecular building blocks emerges from this study. The role of symmetry in supramolecular self-assembly is also clearly evident from the present study.
Description:	Only IISERM authors are available in the record.
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