**SYNTHESIS OF CYCLOHEXANOHEMICUCURBIT[10-12]URILS**

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Hemicucurbiturils (HCs) are neutral macrocyclic host molecules consisting of N,N´-dialkylurea held together by methylene bridges. The HCs have been reported to act as anion channels, amino acid extracting agent, catalyst, and has found application in chiral recognition.1 Enantiomerically pure (*S,S*)- and (*R,R*) cyclohexanohemicucurbit[6]urils2 and (*R,R*)-cyclohexanohemicucurbit[8]uril3 (cycHC[*n*]) has been synthesized using enantiopure *N,N’*-cyclohexa-1,2-diylurea as monomeric unit. Our studies have proved the necessity of an anionic template to drive the reaction toward size-selective formation of cycHC.3 Therefore study toward template-controlled synthesis of larger cycHC has been undertaken. Formation of larger cycHC and oligomers (up to 18 units), though without successful isolation, have been proved in fluorinated acid.4 Number of reaction conditions were screened, using cycHC[8] as starting material and variety of templates, for the synthesis of large homologues. Separation and characterization of new (*R,R*)-cycHC[10 -12]urils will be presented.



***Figure.***  *Synthesis of (all-R,R)-cyclohexanohemicucurbit[10-12]urils from 8-membered homologue.*

**References**

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