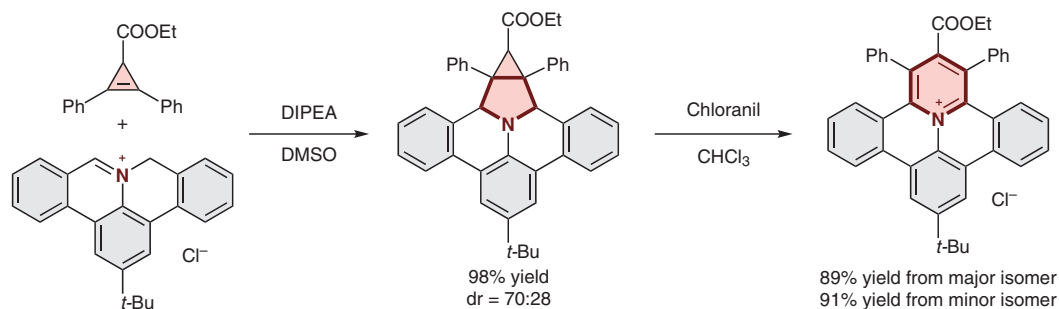


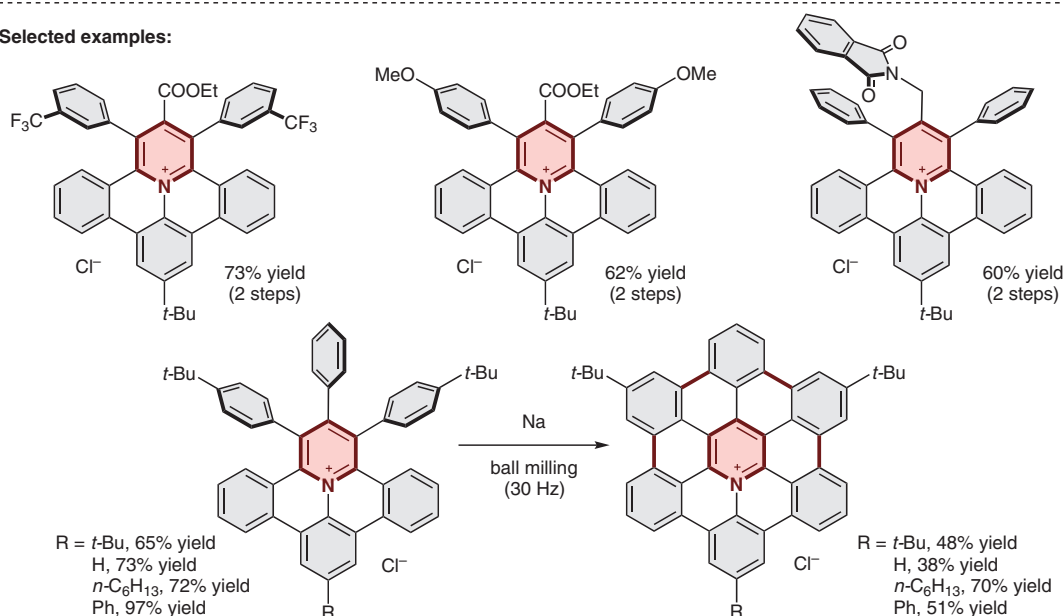
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Synthesis of Azahexabenzocorononium Salts through a Formal [3+3] Cycloaddition Strategy  
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## When Cycloaddition Met Mechanochemistry



### Selected examples:



**Significance:** A formal [3+3] cycloaddition is realized by reacting aromatic azomethine ylides with cyclopropenes, to produce a pyridinium ring. One of the products finally leads to a cationic N-embedded hexabenzocorononium scaffold.

**Comment:** Following a 1,3-dipolar cycloaddition and then oxidative rearrangement of azabicyclohexane into a pyridinium ring, the dehydrogenative cyclization, which failed under the Scholl reaction conditions, is accomplished via a reductive mechanochemical (ball milling) process.

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Category

Synthesis of  
 Materials and  
 Unnatural Products

Key words

azahexabenzocoro-  
 nenium

cationic N-hetero-  
 aromatics

formal [3+3]  
 cycloaddition

reductive cyclization

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