



Gold(III)-mediated contraction of benzene to cyclopentadiene : from *p* -benziporphyrin to gold(III) true tetraarylcarbaporphyrin.

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The reaction of *p*-benziporphyrin, sodium tetrachloroaurate(III) dihydrate, and potassium carbonate in dichloromethane yielded gold(III) 5,10,15,20-tetraaryl-21-carbaporphyrin owing to the contraction of *p*-phenylene to cyclopentadiene. This molecule is the very first representative of a true 5,10,15,20-tetraaryl-21-carbaporphyrin complex where four trigonal donor atoms are involved in equatorial coordination. The contraction adds an unprecedented route to numerous organic transformations of aromatic compounds catalyzed by simple gold(III) compounds. *p*-Benziporphyrin provided the unique environment to alter the fundamental reactivity of the benzene unit facilitating its contraction to cyclopentadiene.

Słowa kluczowe

C-C activation, cyclopentadiene, gold, porphyrinoids, ring contraction

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