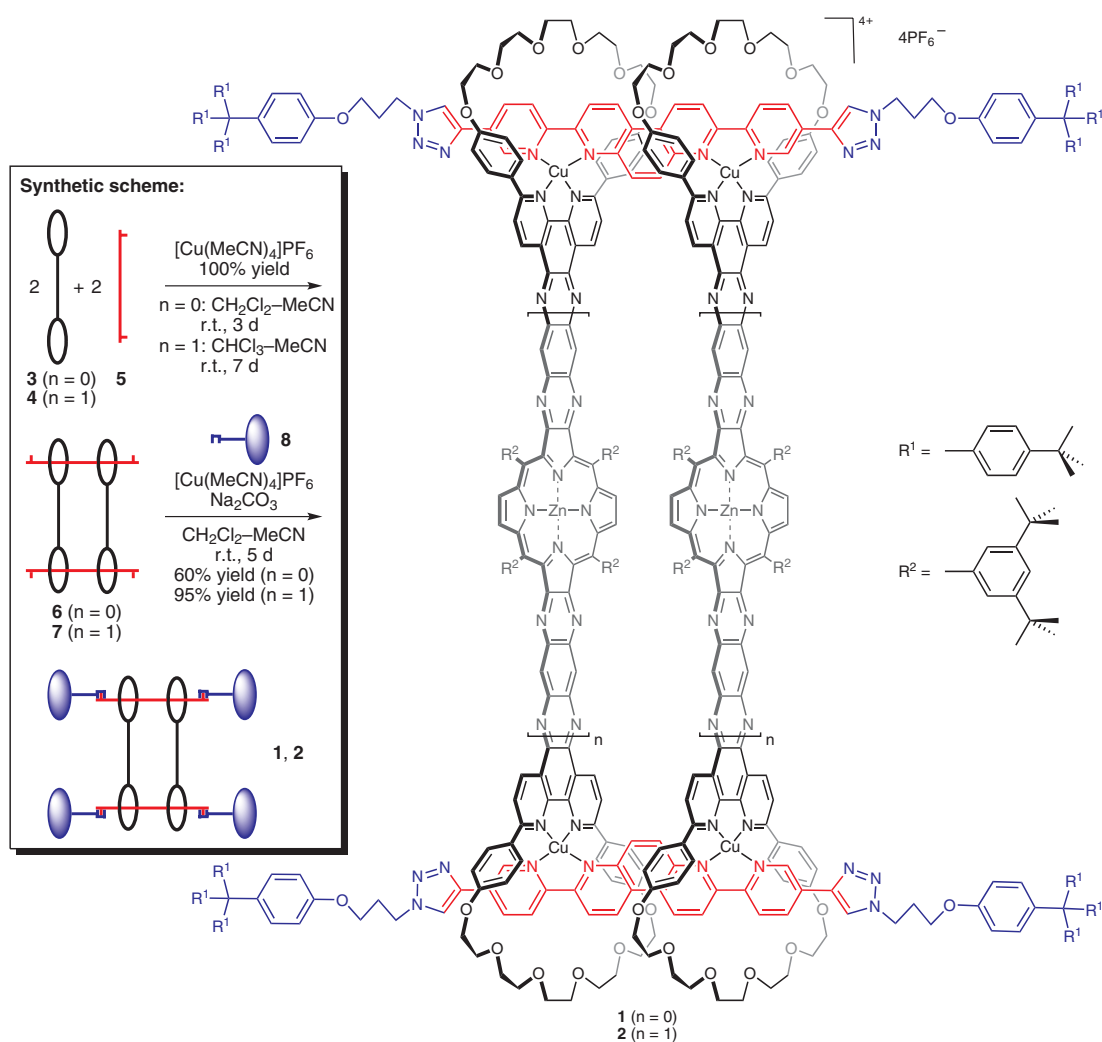


J.-P. COLLIN,* F. DUROLA, J. FREY, V. HEITZ,* F. REVIRIEGO, J.-P. SAUVAGE,*
Y. TROLEZ, K. RISSANEN* (UNIVERSITÉ DE STRASBOURG, FRANCE AND UNIVERSITY OF
JYVÄSKYLÄ, FINLAND)

Templated Synthesis of Cyclic [4]Rotaxanes Consisting of Two Stiff Rods Threaded through Two Bis-macrocycles
with a Large and Rigid Central Plate as Spacer

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A Cyclic [4]Rotaxane



Significance: The authors synthesized the two cyclic [4]rotaxanes **1** and **2**. The structure of **2**, containing zinc porphyrin units, was determined by X-ray crystallography and is the largest rotaxane molecule characterized in this way.

Comment: The synthetic strategy includes the quantitative copper-driven assembly and threading of **5** through the macrocycles **3,4** and the attachment of stoppers **8** by click chemistry in high yields. Compound **2** was tested as a receptor for ditopic guests in complexation studies.

SYNFACTS Contributors: Timothy M. Swager, Birgit Esser
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Category

Synthesis of
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Key words

rotaxanes
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