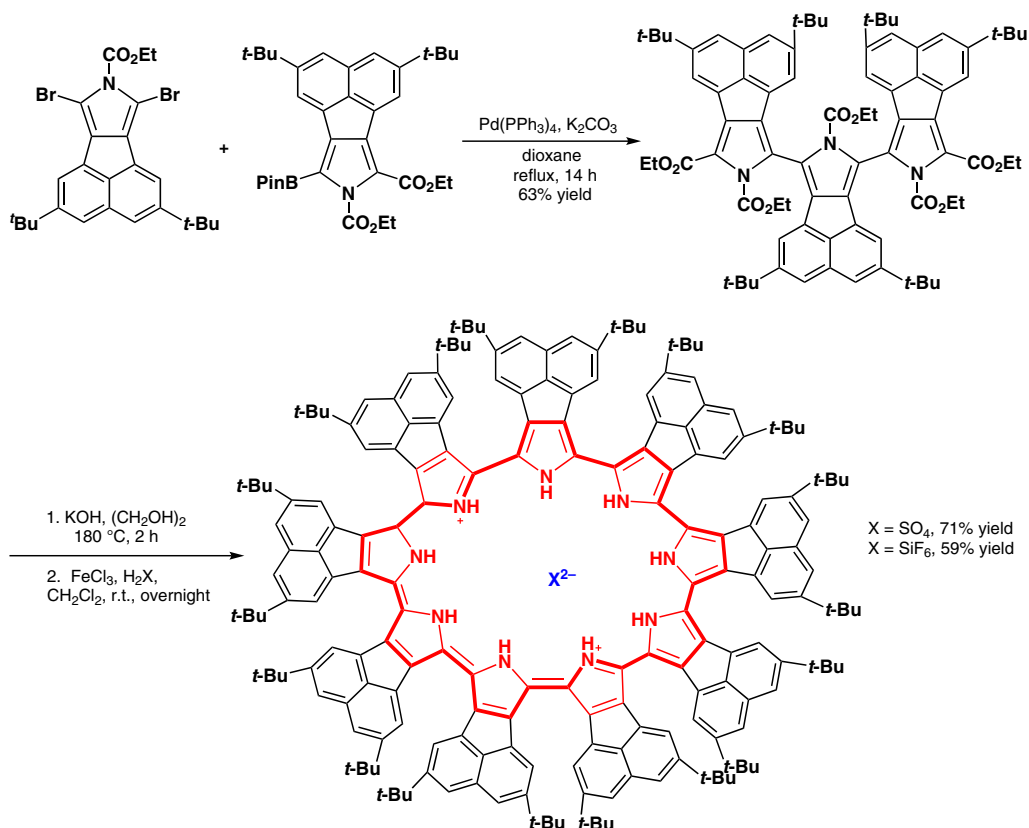


H. MATSUMOTO, T. OKUJIMA\*, S. MORI, A. C. C. BACILLA, M. TAKASE, H. UNO, N. KOBAYASHI\* (EHIME UNIVERSITY, MATSUYAMA AND SHINSHU UNIVERSITY, UEDA, JAPAN)

Cyclo[9]pyrrole: Selective Synthesis of [34]Nonaphyrin(0.0.0.0.0.0.0.0.0.)  
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## Selective Synthesis of Cyclo[9]pyrroles



**Significance:** Cyclo[*n*]pyrroles can be used for selective anion extraction, electron transfer between the macrocycle and the anion, and a supramolecular double-decker complex due to their unique anion-binding properties. Previously, cyclo[8]pyrroles and cyclo[10]pyrroles have been prepared via oxidative coupling of bipyroles as well as using appropriate dianions as templates. However, the synthesis of cyclo[9]pyrroles was never previously achieved. The authors reported an efficient synthetic route for the synthesis of cyclo[9]pyrroles by the oxidative coupling of terpyrroles. Two new cyclo[9]pyrroles with different counter dianions were prepared. In addition, their optical properties and electronic structures were analyzed using magnetic circular dichroism spectroscopy and time-dependent density functional theory calculations.

**Comment:** The oxidative coupling cyclization of terpyrroles provided the macrocyclic compound with very good efficiency. The cyclization reaction did not produce any other cyclo[*n*]pyrroles or linear oligopyrroles, potentially due to the template effect of the counter dianions. The strategy using the monomers with an odd number of pyrrole units and the counter anion templates will aid in the synthesis of other cyclo[*n*]pyrrole frameworks that contain an odd number of pyrrole units.

SYNFACTS Contributors: Timothy M. Swager, Sheng Guo  
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