Organocopper(III) phenanthriporphyrin—exocyclic transformations.

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5,6-Dimethoxyphenanthriporphyrin **1** and 5,6-dioxophenanthriporphyrin **2** act as suitable organometallic ligands for copper(III), adopting trianionic [CCNN] coordination cores. Under oxidizing conditions, in the presence of methanol, copper(III) phenanthriporphyrin **1**-Cu undergoes transformation to copper(III) phenanthriporphodimethene with methoxy substituents attached to two trans meso positions. Addition of acids to **1**-Cu yields two isomeric copper(III) isophenanthriporphyrins protonated on one of the meso carbon atoms. Protonation of copper(III) 5,6-dioxophenanthriporphyrin **2**-Cu yields the aromatic diprotonated complex **2**-Cu-H_2^{2+}. In the presence of HBF_4 **2**-Cu undergoes borylation at the carbonyl oxygen atoms, forming an aromatic exocyclic boron(III) complex.

Adres publiczny

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https://www.acs.org/content/acs/en.html