Pyrrole-based Organocatalysts for Chemical Rearrangements and Living Polymerizations Catharine H. Larsen, Department of Chemistry, University of California, Riverside

Dipyrromethanes constitute half a porphyrin, or an iron-free heme, leading to a wide range of applications.

The high interest in the fundamental properties and intrinsic reactivity of achiral dipyrrin and dipyrromethane complexes of iron, zinc, copper, boron, nickel, and more is due to their establishment as:



We developed the first synthesis of dipyrromethanes with chiral centers installed adjacent to both nitrogens with 99% enantioselectivity to expand dipyrrin systems and as backbones for new ligands.

