

A pincer motif etched into a *meta*-benziporphyrin frame.

Autorzy

Karolina Hurej

Lechosław Latos-Grażyński

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Streszczenie

The incorporation of a *meta*-phenylene moiety into a β -alkylated or *meso*-tetraarylporphyrin framework resulted in the formation of *m*-benziporphyrins. Their molecular design preserves all the essential virtues of the original tetrapyrrolic architecture of *regular* porphyrin, including the perfect match between the ionic radii of the inserted metal cation and the size of the macrocyclic (C₄NN) core, and steric protection provided by thoughtfully chosen β -alkyl or *meso*-aryl substituents. The analogous incorporation of a pyridine moiety yielded a class of pyriporphyrins. The organometallic derivatives of *m*-benziporphyrins and pyriporphyrins are reminiscent of the large family of pincer ligand complexes, in which the metal–arene bond is supported by two amine or phosphine arms. This chapter relates the chemistry of the pincer ligand and that of the *m*-benziporphyrin (aza-*m*-benziporphyrin) emphasizing the fact that both groups have been structurally and functionally based on common dominators, i.e., on *m*-phenylene (aza-*m*-phenylene) rings.

Słowa kluczowe

Carbaporphyrin, Contraction, Metalloporphyrins, Pincer ligand, Porphyrin

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