Copper(II) thiaethyneporphyrin and copper(II) 21-phosphoryl N-confused porphyrin hybrids. Intramolecular copper(II)-carbon interaction inside of a porphyrinoid surrounding.

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Streszczenie

Stabilization of unusual organocopper(II) species via the very efficient protection of the copper(II)–carbon bond has been achieved encapsulating the copper(II) center in the coordination core of suitably constructed carbaporphyrinoids. Copper(II) was inserted into hybrid N-confused porphyrins which contain 21-diphenylphosphoryl-, 21-diphenylthiophosphoryl-, or 21-phosphinodithioic substituents or into 20-thiaethyneporphyrin, an aromatic porphyrinoid, which combines two structural motifs of 21-thiaporphyrin and ethyne. Two distinctly different types of the copper(II)–carbon bond have been detected. Copper(II) hybrid N-confused porphyrins reveal the η^1-C(21) side-on coordination. The unprecedented equatorial metal(II)···η^2-CC interaction has been trapped in a copper(II) thiaethyneporphyrin surrounding.

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