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**Porphyrins with Metal-chelating Groups in the Peripheral Region. II.**  
***meso*-Tetra[2-(8-hydroxyquinolyl)]porphine\***

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It is well known that many natural and synthetic porphyrins accumulate *in vivo* in neoplastic tissues, though the affinity for the tissue seems to be lost in metalloporphyrins. Porphyrins with metal-chelating groups in the peripheral region can be obtained as the free base form of the porphyrin labeled with radioactive or nonradioactive metal ions at the periphery. The potential uses of such porphyrins in medical sciences and analytical chemistry are many.

Previously we reported the synthesis of *meso*-tetra[5-(8-hydroxyquinolyl)]porphine as a model of such porphyrins. We have now prepared one of its isomers, *meso*-tetra[2-(8-hydroxyquinolyl)]porphine by the Rothmund method. Infrared and mass spectra confirmed the structure.

The compound was soluble in dimethylformamide (DMF) but practically insoluble in water. Addition of Cu(II) perchlorate to the DMF solution resulted in biphasic spectral changes, an instantaneous change and a subsequent slow change. The spectrum after the first step showed the formation of the free base porphyrin with metal-chelated 8-quinolinol moieties. The second step was observable in the presence of a large excess of Cu(II) and was ascribed to the formation of the Cu(II)-porphyrin with Cu(II)-chelated 8-quinolinol. Addition of perchloric acid to the solution of the metalloporphyrin gave rise to the spectrum assignable to the Cu(II) porphyrin with unchelated 8-quinolinol.

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