The X-Ray Structure of the Pyochelin Fe$^{3+}$ Complex

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By X-ray structure analysis it could be shown that from the solution equilibrium of pyochelin I and II, differing in the stereochemistry at C-2$^\alpha$ (1a and 1b), crystals of the Fe$^{3+}$ complex of the stereoisomer 1a are formed with a 1:1 metal-to-ligand ratio. Ligand sites are the carboxylate and the phenolate anions and the two nitrogen atoms. Two equivalent ferri-pyochelin moieties are held together by a hydroxy and an acetate unit which satisfy the remaining two coordination sites of Fe$^{3+}$.

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