CRYSTALLOGRAPHIC DATA ON N,N,N',N'-TETRAKIS(2-AMINOETHYL)ETHYLENEDIAMINE PENTAHYDROCHLORIDE — [PENTEN, 5HCl], HYDROXY-PENTEN-COBALT(III) IODIDE AND HYDROXY-PENTEN-COBALT(III) PERCHLORATE

CARL OLAF HAAGENSEN

Department of Inorganic Chemistry, University of Aarhus, Aarhus C, Denmark

Gauss, Moser and Schwarzenbach prepared "penten", 5HCl in connection with investigations of metal complexes with polyamines. Crystallographic data on this compound (1) and on the cobalt(III) complexes [Co(OH)penten]I₂ (2) and [Co(OH)penten]ClO₄ (3) were obtained from rotation and Weissenberg photographs recorded with CuKa radiation and from precession photographs recorded with CuKa and MoKa radiation. The densities of the crystals were measured by the flotation method.

The crystals of all three compounds are monoclinic; from systematic absences (1) and (2) must have the space group P2₁/c (No. 14, C₁₉₀), although (3) has space group P2 (No. 3, C₁₀), Pm (No. 6, C₁₁) the reflections h0l with l = 2n + 1 and 0k0 with k = 2n + 1 are very weak and so (2) and (3) are nearly isomorphous.

Detailed studies of these three compounds are in progress.

The crystals were kindly supplied by professor G. Schwarzenbach, Zürich.

Received December 6, 1963.