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Bimetallic Complexes of Phosphocavitands

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BIMETALLIC COMPLEXES OF PHOSPHOCAVITANDS

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Macrocyclic systems containing in a molecule both coordinated and uncoordinated phosphorus atoms have been obtained by selective interaction of phosphocavitandes with hexacarbonyls of group VI metals. 1,2 The compounds of such type are a suitable matrix for the design of bimetallic complexes. Using the mononuclear complexes of molybdenum 1 as a substrate and $acacRh(CO)_2$ or AgBr as reagents we have first synthesized the bimetallic derivatives of phosphocavitandes in the molecules of which three phosphorus atoms are coordinated with Rh(I) 2 or Ag(I) 3, and one phosphorus atom—with Mo(0).

SCHEME 1

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