

# Wrap-around Encapsulated Cs(dibenzo-24-crown-8)<sup>+</sup> Cations form Linear Coordination Polymers with Dicyanoargentate Anions Ag(CN)<sub>2</sub><sup>-</sup>

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The new macrocyclic dicyanoargentate complex Cs(dibenzo-24-crown-8)[Ag(CN)<sub>2</sub>] has been prepared and studied by means of X-ray diffraction (monoclinic, space group P2<sub>1</sub>/a, with  $a = 12.730(3)$ ,  $b = 15.443(3)$ ,  $c = 15.323(3)$  Å,  $V = 3005(1)$  Å<sup>3</sup>,  $Z = 4$ ,  $R1 = 0.041$ ;  $wR2 = 0.048$  for 5488 unique reflections with  $I > 3\sigma(I)$ ). The lattice consists of complex Cs(db-24-crown-8)<sup>+</sup> cations (as an example of the “wrap-around” structure) and [Ag(CN)<sub>2</sub>]<sup>-</sup> anions forming a one-dimensional polymeric structure. The caesium atoms are coordinated with 8 oxygen atoms of the macrocycle and two nitrogen atoms of the dicyanoargentate groups, bonding to the cation on both sides of the crown-ether. It is the first structure of a dibenzo-24-crown-8 complex with a large metal cation such as Cs<sup>+</sup>.