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### Abstract

The mixed ligand copper(I) derivative  $[\text{Cu}(\text{PPh}_3)_2(\kappa^2\text{-O,O''-lact})]$  (**1**) (lact = L-(+)-lactate) has been prepared and fully characterized. NMR studies indicated the occurrence of a fluxional behavior involving the lactate anion, in solution. The  $\alpha$ -hydroxycarboxylate ligand is responsible for the generation of a catemeric  $\text{O-H}\cdots\text{O}(\text{CO})$  H-bonding network that strongly influences the photophysical properties of **1**, in the solid state. Indeed, when irradiated with UV light the title compound shows a bright phosphorescence, which as suggested by DFT calculations is strictly related to the abovementioned H-bonding network.

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