A Novel Keggin Tungstocobaltate Framework
Supported by Copperbipyridyl Complexes:

\[ \text{[Cu(I)(2,2\,′-bipy)\,]_2\{[Cu(II)(2,2\,′-bipy)\,]_2\text{[HCoW}_{12}\text{O}_{40}\}\} \cdot 4\text{H}_2\text{O} } \]

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A new organic-inorganic hybrid compound based on Keggin tungstocobaltate units supported by copper complexes, \textit{[Cu(I)(2,2\,′-bipy)\,]_2\{[Cu(II)(2,2\,′-bipy)\,]_2\text{[HCoW}_{12}\text{O}_{40}\}\} \cdot 4\text{H}_2\text{O} \text{ (bipy = bipyridine)}, \text{has been synthesized under hydrothermal conditions and characterized by elemental, IR, TG, and XPS analyses and X-ray single-crystal structure determination. The crystal structure is built up from bi-supported Keggin tungstocobaltate polyoxoanions } \text{via } \pi \cdots \pi \text{ interactions along the } c \text{ axis. The electrochemical behavior of the title compound was studied.}

\textbf{Key words:} Polyoxometalates, Tungstocobaltate, Copper Coordination Group, Electrochemistry