

### **$\eta$ - (eta or hpto) (in inorganic nomenclature)**

An affix giving a topological indication of the bonding between a  $\pi$ -electron ligand and the central atom in a coordination entity. A right superscript numerical index indicates the number of ligating atoms in the  $\pi$ -electron system of the ligand which bind to the central atom.

Examples:

- i.  $[\text{Fe}(\text{CO})_3(\text{C}_4\text{H}_6\text{SO})]$ , tricarbonyl( $\eta^2$ -dihydrothiophene 1-oxide- $\kappa O$ )iron.
- ii.  $[\text{Cr}(\text{CO})_4(\text{C}_4\text{H}_6)]$ , tetracarbonyl( $\eta^4$ -2-methylene-1,3-propanediyl)chromium.

R.B. 202; see also B.B. 465; 1994, 66, 1120