back donation

Also contains definition of: Chatt–Dewar–Duncanson model

A description of the bonding of π-conjugated ligands to a transition metal which involves a synergic process with donation of electrons from the filled π-orbital or lone electron pair orbital of the ligand into an empty orbital of the metal (donor–acceptor bond), together with release (back donation) of electrons from an nd orbital of the metal (which is of π-symmetry with respect to the metal–ligand axis) into the empty π*-antibonding orbital of the ligand.

Source:
PAC, 1999, *71*, 1919 *(Glossary of terms used in theoretical organic chemistry)* on page 1925