**isostructural reaction**

A ligand exchange reaction, where the structural type of the metal complex remains the same.

\[ ML_n + X \rightarrow ML_{n-1}X + L + \Delta E \]

Although these types of reactions are not necessarily isodesmic reactions, a substantial degree of error cancellation for the calculated energy, \( \Delta E \), is achieved because the coordination sphere of the metal atom M is conserved.

**Source:**
PAC, 1999, 71, 1919 (*Glossary of terms used in theoretical organic chemistry*) on page 1948