

Answer on Question #53422 – Chemistry – Inorganic Chemistry

Question:

What are oxoacids and also state its general formula?

Answer:

An **oxoacid** is an acid that contains oxygen. To be more specific, it is an acid that:

1. contains oxygen
2. contains at least one other element
3. has at least one hydrogen atom bound to oxygen
4. forms an ion by the loss of one or more protons

Generally, oxoacids are simply polyatomic ions with a positively polarized hydrogen. The oxoacid can dissociate to produce the H^+ cation and the anion of the acid.

Examples of oxoacids:

- Carboxylic acids
- Sulfuric acid
- Nitric acid
- Phosphoric acid
- Halogen oxoacids: Hypochlorous acid; Chlorous acid; Chloric acid; Perchloric acid; Perbromic acid; Metaperiodic acid.

The general formula of oxoacid is $H_nE_mO_k$, where E- the one of non-metal element (however, it can be a metal at the high oxidation state), n, m, k – numbers of atoms.