Question #46708, Chemistry, Physical Chemistry

Sulphur dioxide and nitrogen peroxide can act as an oxidizing as well as reducing agent why?

Answer:

Sulfur dioxide and nitrogen can be oxidizing and reducing due to the fact that the atom is in an intermediate oxidation state. The degree of oxidation of nitrogen atom and sulfur +4.

Oxidation of sulfur: -2; -1; 0; +4; +6

Oxidation of nitrogen: -3, -2, -1, 0, +1, +2, +3, +4, +5.