

reduced species

A term used to characterize the degree of reduction (or oxidation) in atoms, molecules and ions. An atom in a molecule or an ion which has a low oxidation state. An element or atom in a compound can be reduced by the reaction of an element or compound with hydrogen, while it can be oxidized by reaction with oxygen. A reduced species can be formed also through the gain of electrons (either at the negative electrode in a cell or through transfer from another atom, ion or group of atoms in a chemical reaction). For example, the carbon atom in CH_4 and other hydrocarbons is in a reduced state, while the carbon in CO_2 is in an oxidized state. Similarly the sulfur atom in H_2S is in a reduced state while that in sulfuric acid (H_2SO_4) is in an oxidized state.

Source:

PAC, 1990, 62, 2167 (*Glossary of atmospheric chemistry terms (Recommendations 1990)*) on page 2210