



Les espaces reactives de l'oxygene: production et reactivite

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The oxygen, indispensable to aerobic life, may become dangerous for the living organisms, when it is transformed in more reactive species. Ground – state (or triplet) molecular oxygen is the major oxygen form. A small percentage of the oxygen exists in a singlet state (1O_2), caused by absorption of energy (e.g. from UV light) In the pathway for oxygen reduction, the O_2 is first reduced to the superoxide anion radical (O_2^-) and then to the peroxide anion (O_2^{2-}), forming the hydrogen peroxide (H_2O_2). A third electron reduction produces the extremely powerful oxidant, hydroxyl radical ($HO\cdot$). Ground – state oxygen itself is a mild oxidizing agent; whereas singlet