

## **TOPIC VII DEFINITIONS OXIDATION-REDUCTION REACTIONS**

Acid sulfate soils - oxidation of exposed sulfide minerals generating acidity and sulfate minerals

Ferrollysis- overall process of soil acidification by alternating iron reduction and oxidation

Nernst Equation - a mathematical expression that relates the potential of an electrochemical cell to the concentrations of the cell reactants and products

Oxidizing agent - the substance which gains electrons (reduced).

pe - similar to pH it is the negative log of the electron activity sometimes referred to as virtual electron activity.

Redox reaction - reaction that involves the transfer of electrons between chemical species in the reaction.

Reducing agent - the substance which loses electrons (oxidized).

Singlet Oxygen – no unpaired electrons (excited oxygen).

Triplet Oxygen – two unpaired electrons (ground state).

Zero Valent Iron – metallic iron used as a reducing agent.