Particulate matter: Matter in the form of small airborne liquid or solid particles.

Pathway: Conceptually, a route or series of processes by which atmospheric constituents proceed from emission source to sink.

Peroxyacetyl Nitrate: A family of unstable, highly oxidized organic nitrogen compounds that are formed in polluted air by the photochemical action of sunlight on hydrocarbons and nitrogen oxides. They are extremely toxic to vegetation and are powerful eye irritants.

pH: A quantity to describe the acidity of a solution, pH is defined as the negative logarithm (base 10) of the H^+ concentration.

$$pH = -\log [H^+]$$

Phoretic effects: Molecular scale processes in which a gradient of some scalar property causes motion of a particle.

Photochemical reaction: A chemical reaction that takes place as the result of the absorption of light by the reactant(s).

Photochemistry: The study of the effects of light on chemical reactions.

Photooxidation: An oxidation reaction that occurs after one of the reactants has been activated by the absorption of light.

Physical damage function: The mathematical expression linking exposure to damage, expressed in terms appropriate to the interaction of the pollutant and material.

Planetary boundary layer: First layer of the atmosphere extending up to several kilometers above the earth's surface. Above this layer lies the free atmosphere.