



# Different Types of Acid Rain on the Water Stability

Brentley Sara\*

Department of Life Sciences, University of Trieste, Trieste, Italy

## ABOUT THE STUDY

Acid rain is also called as acid deposition, is an extensive term that consists of any structure of precipitation with acidic components, including sulfuric or nitric acid that fall to the ground from the environment in dry forms. This can consist of rain, snow, hail or even dust that is acidic.

Acid rain deposition results when SO<sub>2</sub> (sulfur dioxide) and NO<sub>x</sub> (nitrogen oxides) are emitted into the atmosphere and transported through wind and air currents. The sulfur dioxide and nitrogen oxides react with water, oxygen and different chemical compounds to form sulfuric acid and nitric acids. These then mix with water and different materials before falling to the ground.

While a small portion of the sulfur dioxide and nitrogen oxides that cause acid rain is from natural sources including volcanoes, most of it comes from the burning of fossil fuels. The main sources of SO<sub>2</sub> and NO<sub>x</sub> in the environment are: Burning of fossil fuels to generate electricity. Two thirds of SO<sub>2</sub> and one fourth of NO<sub>x</sub> in the ecosystem come from electrical energy generators. Vehicles and heavy equipment and manufacturing, oil refineries and other industries.

Acid rain is caused by emissions of Sulphur dioxide (SO<sub>2</sub>) and nitrogen oxide (NO<sub>x</sub>), which react with the water molecules in the environment to produce acids. Some governments have made efforts because the 1970s to reduce the discharge of (SO<sub>2</sub>) and (NO<sub>x</sub>) into the atmosphere. These efforts have had advantages results due to the widespread research on acid rain disposing starting in the 1960s and the publicized information on its harmful effects. The main source of (SO<sub>2</sub>) and (NO<sub>x</sub>) compounds that result in acid rain are anthropogenic, but NO<sub>x</sub> can also be produced naturally through lightning moves and Sulphur dioxide is produced through volcanic eruptions.

Acid precipitation or acid deposition has been shown to have adverse impacts on forests, soils, and insects, aquatic life-forms, causing paint to peel, corrosion of metal form including bridges, and weathering of stone buildings and stone statues as well as having impacts on human health.

Acid rain is a popular expression for the more medical term acid deposition, which refers to the various methods in which acidity can move from the environment to Earth's surface. Acid deposition consists of acidic rain as well as other kinds of acidic wet deposition including sleet, hail, and fog. Acid deposition is also including the dry deposition of acidic particles and gases, which can affect the landscapes during dry periods. Thus, acid precipitation or acid deposition is capable of affecting landscapes and the living things that are living inside them even precipitation is not occurring.

Acid precipitation affects the fresh water ponds and lakes and destroys the aquatic life as some species of fishes are rare and may be extinct. It can affect the trees particularly those which are high altitude. It can damage historical monuments and buildings. The buildings can be found with sulfuric acid (H<sub>2</sub>SO<sub>4</sub>).

Acid precipitation leaches aluminum from the soil. That aluminum can be dangerous to plants as well as animals. Acid rain is also removes minerals and vitamins from the soil that trees need to grow. The trees are then less capable of absorb sunlight, which makes them weak and less able to withstand freezing temperatures.

**Correspondence to:** Brentley Sara, Department of Life Sciences, University of Trieste, Trieste, Italy, E-mail: Brentley.Sara@gmail.it

**Received:** 07-Jan-2022, Manuscript No. MCA-22-337; **Editor assigned:** 10-Jan-2022, Pre QC No.MCA-22-337(PQ); **Reviewed:** 24-Jan-2022, QC No MCA-22-337; **Revised:** 27-Jan-2022, Manuscript No.MCA-22-337(R); **Published:** 03-Feb-2022, DOI: 10.35248/2329-6798.10.1.337.

**Citation:** Sara B (2022) Different Types of Acid Rain on the Water Stability. Mod Chem App. 10:337.

**Copyright:** © 2022 Sara B. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.