

## Effects of Air Pollution on Dew Water: A Case Study of Ado-Ekiti, Nigeria

**Authors :** M. Sanmi Awopetu, Olugbenga Aribisala, Olabisi O. Ologuntoye, S. Olumuyi Akindele

**Abstract :** Human existence vis-à-vis its environment is more and more getting a threatened sequel to air pollution occasioned majorly by human coupled with natural activities. Earth is getting warmer; ozone layer is getting depleted, acid rain is being experienced, all as a result of air pollution. This study seeks to investigate the effect of air pollution on dew water. Thirty-one (31) samples of dew water were collected in four locations in Ado- Ekiti, Ekiti State Nigeria. Analytical studies of the dew water samples were carried out to determine the pH, Total Dissolved Solids (TDS) and Electrical Conductivity (EC) in order to determine whether the dew water is polluted or not. There is no documented world standard for dew water quality. However, the standard for normal rain water which is pH between 5.0-5.6 and acid rain pH between 4.0-4.4 was adopted for this study. The pH of dew water samples collected and analyzed ranged between 5.5 and 7.9 in Olokun Ado-Ekiti while other samples fell in between this range. In Government Reserved Area (GRA), Ajilosun and EKSU school area, the pH ranged between 6.4 and 7.9 while EC fell in between 0.0 and 0.9 mS/cm which shows that the observed zones are polluted. Everyone has a role to play in order to reduce the pollutants being released into the atmosphere. There is a need to develop an international standard for dew water quality.

**Keywords :** dew, air pollution, total dissolved solids, electrical conductivity, Ado-Ekiti

**Conference Title :** ICEEE 2018 : International Conference on Ecology, Environment, and Energy

**Conference Location :** Montreal, Canada

**Conference Dates :** May 24-25, 2018